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The Managerial Workforce in Canada: A Century of Change

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**by
Noah M. Meltz
August 1999**

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Strategic Policy
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**Direction générale de la recherche appliquée
Politique stratégique
Développement des ressources humaines Canada**

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Abstract

There has been a substantial long-term growth in the number of managers in Canada in the twentieth century. The proportion of people employed as managers has more than doubled. In addition, what managers do has changed dramatically as well. This study examines where the changes in the employment of managers occurred in terms of industries, why they occurred, and what these changes mean for the Canadian Occupational Projection System (COPS).

In the past two decades the largest source of increase in number of managers has been the growth in the share of managers within most industries. This growth seems to have been the result of a combination of changes in technology, size of establishments and structure of employment in industries. The major changes in the classification of who is a manager also had a sizeable impact on the number of managers.

What stood out in the analysis of the characteristics of managers was the substantially lower levels of education and of earnings of managers in retail trade, food services and accommodation services. For COPS, this finding, as well as the others, suggested the need for careful scrutiny in the classification of managers, the need to understand differing career paths and the education/training requirements of various types of managers. As well, the study stressed the importance of an ongoing analysis of the impact of changing technology, of organization structure and of establishment size in projecting the future number of managers in Canada.

Résumé

Le nombre de gestionnaires a connu, à long terme, une croissance substantielle au Canada, au cours du XX^e siècle. Le pourcentage des postes de gestion a plus que doublé. De plus, les tâches des gestionnaires ont changé de façon radicale. La présente étude examine dans quels secteurs de l'industrie se sont produits les changements, pourquoi ils se sont produits et ce qu'ils signifient dans le contexte du Système de projection des professions au Canada (SPPC).

Au cours des deux dernières décennies, il semble que ce soit l'augmentation de la part de gestionnaires au sein de la plupart des industries qui ait été la cause la plus importante de l'augmentation globale du nombre de gestionnaires. Cette croissance serait attribuable à un agencement de changements technologiques et de changements dans la taille des organisations et la structure de l'emploi dans les différents secteurs industriels. Des modifications majeures de la classification des postes de gestion ont également eu des répercussions appréciables sur le nombre de gestionnaires.

Il ressort de l'analyse des caractéristiques des gestionnaires que le niveau d'études de ceux qui occupent un poste dans le secteur du commerce de détail, des services d'alimentation et de logement est de beaucoup inférieur aux autres. Dans la perspective du SPPC, cette constatation, entre autres, souligne la nécessité d'analyser soigneusement la classification des gestionnaires ainsi que de comprendre les cheminements professionnels différents et les exigences liées aux études et à la formation correspondant à différents types de poste de gestion. L'étude souligne également à quel point il est important d'analyser de façon continue l'incidence de l'évolution de la technologie, la structure organisationnelle et la taille de l'entreprise dans la projection du nombre éventuel de gestionnaires au Canada.

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Executive Summary

The purpose of this study is to provide an overview of the long-term patterns of growth and change in the employment of managers in Canada and the implications for the Canadian Occupational Projection System. The overview begins in 1901 and covers the period up to 1998. The most detailed analysis is for the periods 1931-1961 and 1971-1996. The following are the main observations and conclusions.

1. The proportion of the workforce classified as managers more than doubled between 1901 and 1998, from 4.3 to over 9.0 percent.
2. The growth was not smooth. Managers declined in the 1930s during the great depression, and in the 1970s due to a change in the classification of who is a manager. Substantial growth occurred during the wartime and early post-war periods of the teens and 1920s, as well as the 1940s and 1950s. Further gains were made in the 1980s.
3. The analysis of sources of change in the number and proportion of managers examined the impact of shifts in the distribution of employment among industries (composition effect) and the impact of changes in the share that managers represented of employment within industries (incidence effect). Two periods were considered: 1931-1961, and 1971-1996. The growth in the proportion of managers in Canada between 1931 and 1961, was about one-third that between 1971 and 1986. The shift-share analysis found differing factors responsible for the changes that occurred. Between 1931 and 1961, the dominant factor in the growth of managers was the expansion of industries employing managers. Between 1971 and 1996, the only factor was the rising percent that managers represented of employment in all industries except trade. In the analysis, concerns were expressed relating to the classification of managers in the 1971 census. Accordingly, comparisons of the sources of growth were made between 1931-1961 and 1981-1996, where the increases in the proportion of managers were identical. The results showed the broadening of the sources of increase on managers in the most recent period.
4. While managers as a group are highly educated, there are substantial differences in the levels of education of managers among industries. The largest division is between managers in retail trade, food services and accommodation services on the one hand, representing about one-third of all

managers, and managers in other industries. Managers in trade, food and accommodations are much less likely to have a university degree (15 percent) than the other managers (more than 30 percent); and much more likely to have high school graduation or less (50 percent), than other managers (under 40 percent).

5. There is also a striking difference in the employment earnings of managers in retail trade, food and accommodations as compared with other managers. Our statistics focused on full-time, full-year employment, and we still found that managers in retail trade, food and accommodations earned between ten and twenty percent less than the average income of all employees in 1996. In comparison, managers in every other industry earned well above the average for all employees, up to almost three times the average in the case of managers in mining, quarrying and oil wells.

6. The study stressed the importance of understanding more about the relationship between the low education and low earnings of managers in retail trade, food and accommodations.

7. These findings suggested several implications for COPS:

- the need for caution in using long-term patterns of managerial change as the basis for projections because of the swings in the numbers following changes in the classification of who is a manager.
- the importance of understanding the factors behind the growth of managers, both the factors that spurred the growth of industries employing managers, and the factors that most recently have caused an increase in the share of managers within most industries.
- in particular the impact of technology, organization size, the trend toward outsourcing and specialization, all have affected the number of managers. The move toward smaller establishments has been an especially important contributor.
- given the interest in business and management education by students and employees seeking to upgrade their career prospects, there is an urgent need to examine the various paths toward attaining managerial positions, at a time when the nature of these positions is changing rapidly.

1. Introduction: Everybody Wants to be a Manager

One of the most popular and rapidly expanding fields of study in universities throughout the world is business and management. At the graduate level, competition for places in the Master of Business Administration (MBA) program, has become so intense, that the leading management schools now require two to three years of work experience before admitting students.

The primary reason for the interest in business/management studies is the perception that there are significant opportunities for careers in managerial and business, finance and administrative positions, positions that provide interesting careers and substantial salaries. Further evidence of the popularity of business studies is the sharp increase in tuition costs for business/management studies, especially at the graduate level. There seems to be a trend in Canada for these graduate studies to be "privatized," that is, with fees based on the full costs of study rather than at lower, government-supported fees. Students themselves, or if they are employed, the companies in which they work, view this high cost as an investment, with an expected return in the form of higher salaries, greater promotion possibilities, and greater productivity.

Have career opportunities in the business/management field expanded as rapidly as the rush of students suggests? Will these positions be expanding into the future? Part of the demand by students includes the upgrading or retraining of persons who are already in managerial positions or persons aspiring to management positions.

In the early 1900s, less than one out twenty employees was a manager. Approaching the end of the Twentieth Century one in ten workers is a manager, and if business and finance positions are included, the combined number rises to almost one in seven. It is no wonder that students aspire to, or want to be upgraded for business/management positions. In 1996 one-third of all managers had a university degree compared with one in five for the entire workforce. University education is growing significantly for managers. The purpose of this study is to provide a long-term view of the evolution of the managerial function in Canada. By how much have these positions grown in absolute and relative terms, where have they grown, what factors are associated with their growth, and what are their socioeconomic characteristics, in particular their education and employment income?

The study begins in section 2, with a discussion of who is a manager. The definition of who is a manager may seem very straightforward, but in fact, there have been more changes in who is a manager than perhaps in any other major occupational category. Section 3 presents almost a century of data on the number of managers in Canada, and what percentage this represents of the total workforce. While the long-term trend is up, the direction has not always been upward. There has been growth, but there has also been decline.

To understand the nature of the growth, section 4, looks at the industries in which managers work, and how these patterns have changed over time. Because a manager in one field can have a very different training and perform very different functions from a manager in another field, it is important to examine the changing patterns of employment. To do this in more precise terms, section 5 presents a shift-share analysis of the change in the number of managers arising from the growth of the industries in which they are located, and from an increase in the proportion of an industry's employment represented by managers.

Sections 6 and 7 focus on two specific socioeconomic dimensions: education levels and employment income levels, respectively. Section 8 focuses in more detail on managers located in retail trade, food and accommodation services, the most anomalous of all of the managerial groups. The implications for the Canadian Occupational Projection System (COPS) of the analysis of trends in the employment of managers is presented in section 9, while concluding comments are set out in section 10.

2. Definition of Managers: What Goes Around, Comes Around

2.1 The concept of an occupation

It is important at the outset to distinguish between an occupation and an industry. An occupation is a type of work; an industry is based on the kind of product produced:

At least four different purposes for classifying occupations can be identified:

1) classification of statistics derived from labour force inquiries, particularly from population censuses, that is, counting people; 2) determination of different job characteristics for employment placement and career guidance; 3) assessing the relationship between education and training and occupations; and 4) establishment of a basis for wage and salary payment. (Meltz 1969, p.3)

An industry is defined as a group of establishments producing or dealing in similar kinds of product, whether they are goods or services. The same type of problem arises in attempting to classify an industry as with occupations: 1) to determine what constitutes a particular kind of product; and 2) to decide how broad or narrow the categories are to be. (Meltz 1969, p.6)

An accountant performs a type of work. That work could be performed in a factory, in a hospital, in a school or in a restaurant. Some occupations are particular to the type of product produced: most nurses work in health care industries, such as hospitals, nursing homes, but some also work in clinics within factories. What further complicates the distinction between occupations and industries is who directly hires the employees. A secretary working in a manufacturing organization, but paid by a temporary help agency, is not counted as employed in manufacturing, but rather is deemed to be employed in the business service sector (Meltz 1969, Meltz and Stager 1978). This section will discuss the occupation classification of managers, while section 5 will deal with industry classification.

Managers are people who are responsible for directing the work of other employees. There are three major levels of management functions: senior; middle and specialist; and front-line or supervisory. Senior managers plan, organize, direct and control through middle managers, the work within an organization. Middle or specialist managers plan, organize, direct and control the operations of specific types of work or sections within an organization. Front-line or supervisory personnel are not considered managerial positions because they do not have the breadth of responsibilities of managers in terms of direction and control. Rather, supervisors assign workers

to duties, prepare work schedules, co-ordinate activities, and resolve problems in the workplace, and may even hire people, but they do not have the broader range of responsibilities of control, firing and wage and salary determination (See *National Occupational Classification*, 1993).

Given this general definition, why is it that formal occupational classifications are changed frequently? Isn't a manager, a manager, a manager? There are three main sources of changes in occupational classifications with respect to managers. First, due to changes in technology, the functions that people perform, and the equipment with which they perform them, change over time. Managing now involves a much broader range of education and training in financial and human resource skills as well as computer information systems to process information to better manage the organization.

Second, ideas about the best approach to the management of people have changed. This includes notions of strategic planning, flattening of organization structures, downsizing, outsourcing and various forms of employee involvement. All of these changes affect the conduct of the management function. Strategic planning requires more specialized knowledge and information on the part of the manager doing the planning. Flattening the hierarchical nature of an organization's structure requires eliminating those managerial functions that are not necessary. While this can streamline the upper echelons of an organization, it puts more pressure on the remaining managers, and thereby alters the nature of managerial responsibilities.¹ Similarly, downsizing, outsourcing and employee involvement affect the tasks and responsibilities of managers.

Third, the classification of managers can change if those doing the classification alter their views on what is considered to be a managerial function. This third source of change has perhaps affected the managerial category the most.

¹ In the aftermath of the 1981-82 recession, there was substantial downsizing which was subsequently reversed during the expansion from the mid to the later 1980s. In the 1990s there has also been a slimming of the organization hierarchy, but evidence is beginning to emerge that once again the downsizing went too far, just like fad diets.

As a final comment on the concept of a manager, it should be noted that the combination of dramatic changes in all three factors have made defining the managerial category very volatile. This is especially the case in the absence of a general licensing body and the absence of prescribed qualifications for designating an employee a manager.

2.2 Census classification of occupations

The first population census of Canada was conducted in 1871 and a census is conducted by law every ten years in the first year of each new decade. A quinquennial census in much less detail, for at least part of the country, was conducted through most of the 20th century. But the first time detailed occupations were introduced was in 1986, with the inclusion of a question on employment by occupation. This latter census is not required by law, but is decided on by the Government of Canada in conjunction with Statistics Canada.

The planning for a census includes taking a decision as to what occupation and industry classifications will be used. Each census since 1931 has included a revised classification of occupations. Some revisions have been more fundamental than others have. For example, in the 1971 occupational classification only 9 out of 486 unit classes were comparable between the 1961 Occupational Classification Manual (OCM) and the 1971 OCM (Meltz and Stager 1979, p. 188). This change was the result of the development of the *Canadian Classification and Dictionary of Occupations* (CCDO) in 1971 by what was then called the Department of Manpower and Immigration (now known as Human Resources Development Canada). What was significant about the CCDO was its goal of developing a classification that could be used both for counting people, as is done in the decennial census and the monthly labour force survey, as well as for placing people as is done by the federal government's employment service.

The 1991 occupation classification manual, titled the 1991 Standard Occupational Classification (SOC), was also a significant change from the 1981 manual, being based on the major revision to the CCDO prepared by Human Resources Development Canada entitled *National Occupation Classification* (NOC), (Canada Communication Group 1993). The NOC includes a classification of occupations by skill level: A - university degree; B - two to three years of post-secondary education, or two to four years of apprenticeship training, or three to four years of secondary

school and more than two years of on-the-job training. Occupations with managerial responsibility are assigned to skill level A, and supervisory responsibilities are assigned to skill level B. There are two other skill levels: C – one to four years of secondary school education, up to two years of on-the job training; and D – up to two years of secondary school and short work demonstration.

The Appendix discusses in more detail the definitions of managers for various decennial and quinquennial population censuses since 1951. The most significant change over time was the exclusion from the 1971 census managerial group of managers in retail trade departments and managers of industry. Specific examples of the changes that took place are included in The Appendix. At the same time, there was an addition to the managerial group of occupations related to managers and administration: accountants, personnel and related officers, purchasing officers and buyers, inspectors and regulatory officers. Prior to 1971, these occupations were classified as professionals, but in the 1971 classification there was no designation of professionals as such. In subsequent census classifications, there was a gradual reversal of many of the changes made in the managerial category in 1971. In 1981 some of the retail department managers were returned to the managerial category, and more rejoined that group in 1991. As well, the grouping Occupations Related to Managers and Administration disappeared in the 1991 census, being replaced by the general category Business, Finance and Administrative occupations. This group, in turn, was broken down into Professional Occupations, Skilled Administrative Occupations and Clerical Occupations. Other categories of professional occupations were introduced together with less skilled supporting groups. The result of this lack of consistency over time in the classification of managers has been sharp fluctuations in the number of workers classified as managers, and an overriding difficulty in determining who is a manager and how many there are at any point in time. The impact of the changes in classification is discussed next.

3. Long-Term Trends in the Managerial Workforce, 1901-1996: Up, Up, But Not Away

Almost a century of data on managers in Canada is presented in Table 1. The data are the adjusted numbers based on the 1951 classification for 1901 to 1961, the 1971 classification for 1961, 1971, 1981 and 1986, the 1980 classification for 1971 to 1996, and the 1991 classification for 1991 and 1996.

The data show a long term upward trend in the number and percentage of the total workforce in the managerial group. However, the table also shows that the trend was not smooth. In fact, the share of managers in the total work force declined from a high of 7.2 percent of the workforce in 1921 to 5.4 percent in 1941. Absolute and relative growth resumed in 1951 and continued until 1961. As far as can be determined, the huge decline in the number of managers from 1961 to 1971 is the result of the dramatic change in the definition of managers. As noted above, the 1971 classification removed several major categories from the managerial group, such as managers, retail trade departments, and managers, restaurants and hotels. These three groups were assigned to supervisory groups in service categories.

A separate source that supports the view that the change in classification affected the number of managers, can be seen in Table 2, which presents Labour Force Survey data on the employment of managers from 1966 to 1998, based on various occupation classifications. In 1972, using the 1961 classification, there were 810,000 managers employed in Canada, 9.9 percent of the total employment. In 1973, when the 1971 occupational classification was introduced to the Labour Force Survey, the number of managers plummeted to 492,000, 5.7 percent of the workforce. There is no possibility that 318,000 managers disappeared in one year.

Between 1983 and 1984, when the 1980 occupational classification was introduced, the number of managers in Canada grew by 272,000 in one year, from 944,000 to 1,216,000, a growth from 8.5 to 10.7 percent of total employment. Again, it is not conceivable that such a huge upward shift in the share of managers could have taken place in the absence of the change in classification. The 272,000 increase from 1983 to 1984 was six times the average annual increase in the

preceding ten years, and almost all of the 296,000 net increase in employment in all occupations in Canada in that year.

TABLE 1
Managerial Workforce in Canada, Census and Labour Force Survey Data,
Labour Force and Employed, 1901-1996

Year	Census						Labour Force Survey		
	Total		Managerial				Total Employed	Number Managerial	%
			Number		Percent of Total				
	Labour Force	Employed	Labour Force	Employed	Labour Force	Employed			
1901	1,782,832		77,260		4.3				
1911	2,723,634		126,777		4.7				
1921	3,164,348		228,611		7.2				
1931	3,917,612		219,753		5.6				
1941	4,195,951		225,551		5.4				
1951	5,214,913		392,896		7.5				
1961a	6,342,289		500,911		7.9				
1961b	6,471,850		539,040		8.3				
1961c	6,922,047	210,681	3.0						
1966							7121000	670,000	9.4
1971	8,626,925	8,103,510	183,960*	219,073*	2.1	2.7	7,958,000	783,000	9.8
1971	8,626,925		372,245**		4.3				
1981	12,005,320	10,665,995	556,570*	746,610*	4.6	7.0	11,398,000		
1981	12,005,320		814,035**		6.8		11,398,000	920,000	8.1
1986a	12,783,505		678,960*		5.3				
1986a	12,783,505		1,008,995**		7.9				
1986b	12,740,225	11,702,160	999,115*	965,550*	7.8	8.3	12,095,000	1,060,839	8.8
1986b	12,740,225		1,341,970**		10.5		12,095,000	1,453,000	12.0
1991a	14,220,230	13,005,270	1,312,515*	1,260,325*	9.2	9.7	12,916,000		
1991a	14,220,230		1,739,165**		12.2		12,916,000		
1991b	14,220,230		1,383,410		9.7				
1996a	14,317,545	13,754,746		1,403,764***		10.2	13,676,000	1,313,496	9.6
1996b	14,317,545	13,318,715	1,289,120	1,253,245	9.0	9.4	13,676,000	1,900,000	13.9

Sources:

1901-1961a: Noah M. Meltz, *Manpower in Canada - Historical Statistics of the Canadian Labour Force*, 1951 Occupational Classification Manual.

1961b: 1961 Census of Canada, *Labour Force Occupations Divisions by Detailed Industries and Sex*, Canada Dominion Bureau of Statistics, Bulletin 3.2-13 CAT.94-530 Volume 3; Part 2, 1964.

1961c, 1971, 1981, 1986a: *Census Canada 1986, Occupational Trends 1961 - 1986* Statistics Canada CAT.93-151, 1988 Standard Occupational Classification (SOC).

1986b, 1991a: The Nation (Statistics Canada), CAT.93-327, March 1993. 1980 SOC, Experienced Labour Force.

1991b, 1996b: Statistics Canada, *Special Tabulations based on the 1991 SOC*.

* 1980 SOC Occupation Codes 111 and 113/114. Excludes Occupation Code 117

** 1980 SOC Occupation Codes 111, 113/114 and 117.

*** 1996a: Managerial on 1980 SOC includes only codes 111 and 113/114. Code 117 is excluded. HRDC, Special Tabulations, Sept. 1998.

Estimates of the number of managers employed in Canada, according to the National Occupation Classification (NOC), were developed by Statistics Canada from the Labour Force Survey back to 1987. For 1987 on an NOC basis, there were 1,179,000 managers compared with 1,506,000

using the 1980 SOC, a loss of 327,000 managers. However, if we exclude the group within the 1980 SOC known as Occupations Associated with Managers and Administration (code 117), then the NOC for managers is actually larger by 105,000 than the 1980 SOC (1,179,000 vs. 1,074,000). The gap increases to 172,000 by 1998 (1,490,000 vs. 1,318,000, see Table 2).

Table 2 and Charts 1 and 2, show that the core managerial group (Officials and Administrators unique to Government, codes 111, plus Other Managers and Administrators, codes 113/114, using the 1980 SOC) grows steadily from 1984 to 1998, but much more moderately than the occupations associated with managers and administration (code 117). The former grew by a little over twenty percent, from 7.8 to 9.5 percent, whereas the latter group shot up fifty percent from 2.9 to 4.8 percent. When the employment data are converted to the NOC as is also shown in Table 2, a similar moderate growth is evident in the number of managers from 1987 to 1998, from 9.5% to 10.4%. The message from this table is clear; the most rapid growth was in the specialized professional occupations supporting managers, rather than managers themselves. These specialized professionals were in jobs to which university students as well as community college students were aspiring.

If managers and occupations associated with managers went up, what went down in relative terms? A quick answer is that manual workers outside of the primary industries declined. The occupational structure of the Canadian workforce was continuing its long-term trend which at first had been from primary (agricultural, forestry fishing and mining) to secondary (blue-collar) occupations and by mid-century was shifting from secondary to tertiary (white collar). Within the white collar group the shift was from less skilled clerical toward more specialized professional and managerial jobs (see Meltz 1965).

TABLE 2
Total and Managerial Employment, Canada, 1966 to 1998
Annual Averages, in Thousands, Selected Occupation Classifications

		Managerial and Administrative			Percentage		
Year	Total Employment	111+ 113/114	117	Total*	111+ 113/114	117	Total
1961 OCM							
1966	7,121			670			9.4
1967	7,324			692			9.4
1968	7,461			711			9.5
1969	7,693			745			9.7
1970	7,778			781			10.0
1971	7,958			783			9.8
1972	8,191			810			9.9
1971 OCM							
1973	8,598			492			5.7
1974	8,951			532			5.9
1975	9,044			544			6.0
1976	9,776			658			6.7
1977	9,978			687			6.9
1978	10,320			773			7.5
1979	10,761			824			7.7
1980	11,082			848			7.7
1981	11,398			920			8.1
1982	11,035			623			310
1983	11,106	633	310	944	5.7	2.8	8.5
1980 SOC							
1984	11,402	884	332	1,216	7.8	2.9	10.7
1985	11,742	986	362	1,348	8.4	3.1	11.5
1986	12,095	1,061	392	1,453	8.8	3.2	12.0
1987	12,422	1,074	431	1,506	8.6	3.5	12.1
1988	12,819	1,147	470	1,618	8.9	3.7	12.6
1989	13,086	1,139	481	1,620	8.7	3.7	12.4
1990	13,165	1,200	497	1,697	9.1	3.8	12.9
1991	12,916	1,208	527	1,735	9.4	4.1	13.4
1992	12,842	1,214	521	1,735	9.5	4.1	13.5
1993	13,015	1,244	525	1,769	9.6	4.0	13.6
1994	13,292	1,222	551	1,773	9.2	4.1	13.3
1995	13,506	1,317	584	1,901	9.8	4.3	14.1
1996	13,676	1,314	586	1,900	9.6	4.3	13.9
1997	13,941	1,323	607	1,930	9.5	4.4	13.8
1998	14,326	1,318	691	2,009	9.2	4.8	14.0
1991 SOC							
1987	12,422	1,179			9.5		
1988	12,819	1,257			9.8		
1989	13,086	1,256			9.6		
1990	13,165	1,325			10.1		
1991	12,916	1,343			10.4		
1992	12,842	1,341			10.4		
1993	13,015	1,371			10.5		
1994	13,292	1,368			10.3		
1995	13,506	1,470			10.9		
1996	13,676	1,488			10.9		
1997	13,941	1,484	10.6				
1998	14,326	1,490	10.4				

Sources: Statistics Canada: The Labour Force

1966 - 1972: Occupational Classification Manual (1961 OCM) 1961

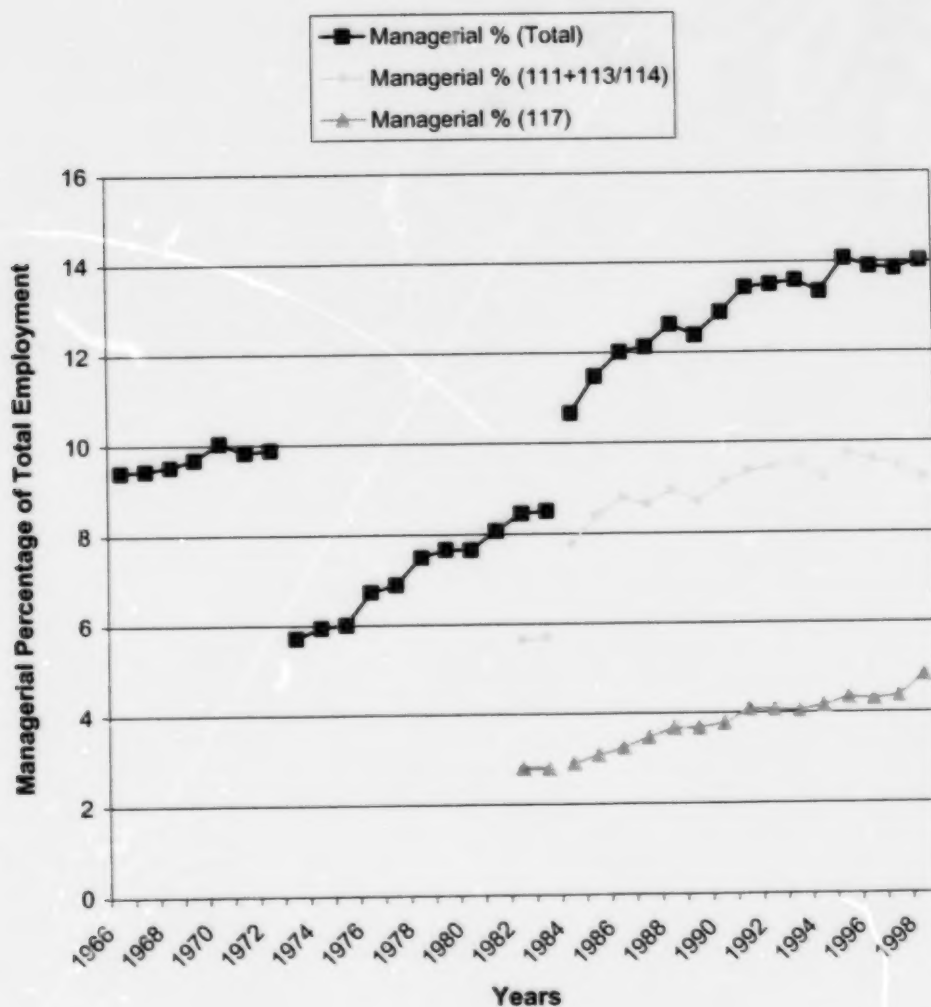
1973 - 1983: Occupational Classification Manual (1971 OCM) 1971

1984 - 1997: 1980 Standard Occupational Classification

1987 - 1998: 1991 Standard Occupational Classification

* Figures may not add due to rounding.

**Chart 1: Managerial Employment in Canada
As a Percentage of Total Employment**



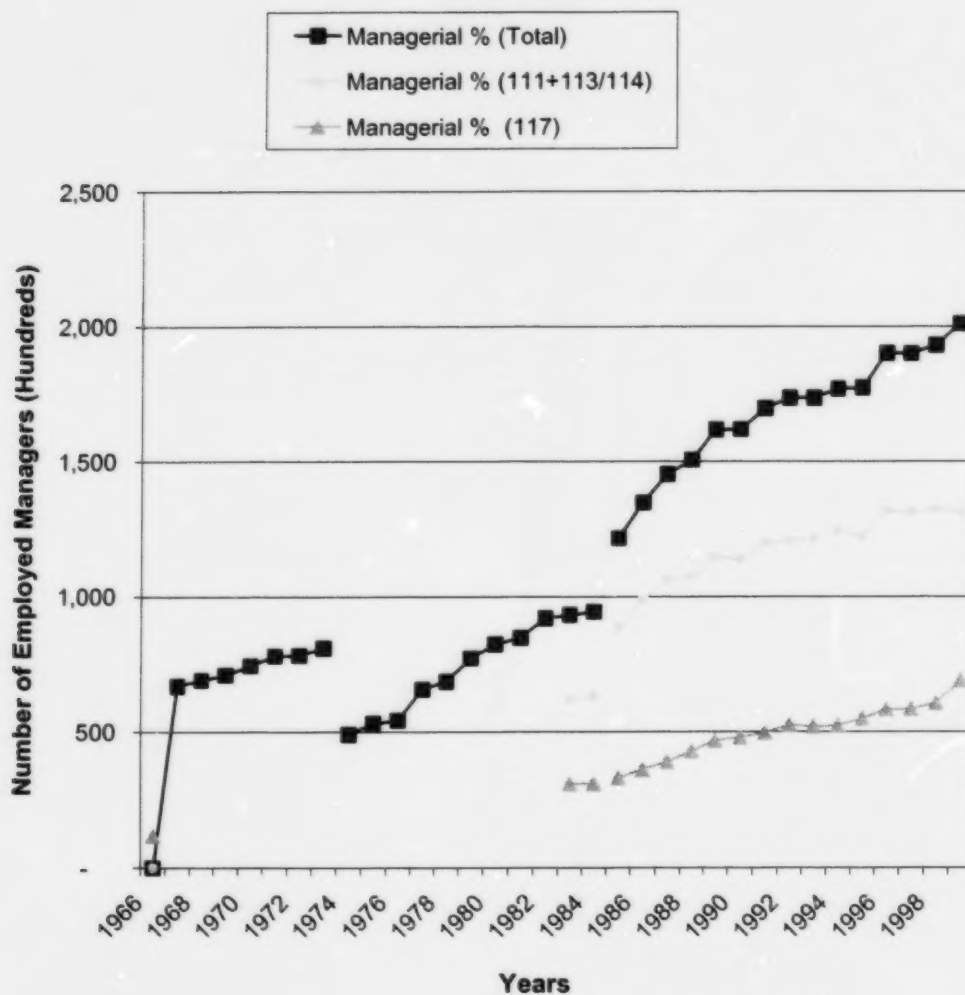
Sources:

1966 – 1972: based on 1961 Occupational Classification Manual

1973 – 1983: based on 1971 Occupational Classification Manual

1984 – 1998: based on 1980 Standard Occupational Classification

Chart 2: Managerial Employment Level in Canada

**Sources: Table 4**

1966 – 1972: based on 1961 Occupational Classification Manual

1973 – 1983: based on 1971 Occupational Classification Manual

1984 – 1998: based on 1980 Standard Occupational Classification

4. Where Managers Work

Every organization has managers. But every organization doesn't have the same percentage of its employees who are managers. The proportions differ both at a point in time as well as over time. There are differences in the share that managers represent of employment from organization to organization and from industry to industry. First, the nature of the physical capital and the technology used in an industry, and the particular structure within the industry, influences the proportion of employees who plan, direct and control the operations of an organization. In some organizations there can be a greater span of control, hence fewer managers are needed per 100 employees. Second, as a rough rule of thumb, the smaller the organization the higher the percentage of managers. While large organizations may have sizeable numbers of managers, in terms of proportion of all employees, they have less. For example, retail trade, which is characterized by small units that are either independent locations or small units within larger organizations, tends to have more managers. On the other hand, the proportion of managers is low in health, education and transportation, which have larger establishments.

A third factor in the share of managers may relate to whether we are dealing with the public sector or the private sector. A popular view would suggest that public sector employers tend to have more managers than private sector employers, because the private sector is more "bottom line" oriented. That is, the private sector is more cost conscious, hence would be more concerned with keeping a smaller number of managers, those doing the controlling, as opposed to the public sector. The only way to really test this hypothesis would be to compare identical firms in the same industry, one of which is privately owned and one which is publicly owned. In the absence of such data, we can only look at the industry groupings that are either primarily public or primarily private, recognizing that the average establishment size will be an important factor.

Table 3 presents data on the proportion that managers represent in each major industry since 1931. While the industry categories are broad for purposes of long-term comparisons, the data estimated by HRDC, on a 1980 SOC basis suggests that, with only a few exceptions such as public administration in 1996, there are some consistent patterns over time. In general, there has been an increase in the proportion of managers in each industry, but there have been fluctuations as well. Trade is consistently at or near the top, although its managerial share has been declining.

Finance has been steadily rising in managerial share of all employees to second place, while business and personal service is third in the nine industry grouping. The figures for Public Administration (Government) are somewhat puzzling because the managerial incidence in public administration drops from an estimate by HRDC of 18% for 1996 on a 1980 SOC basis, to 10.3 percent according to the census data from Statistics Canada on an NOC basis. Further research is necessary to understand the source of the differences. Health and education is at the bottom or second from the bottom, trading places with the primary sector. These data suggest that the ranking of industries in terms of the managerial proportions we observe in 1996 has been roughly consistent over time. The data in our tables for 1996 indicate that the five largest managerial proportions are in private sector industries: finance and insurance; trade; accommodation, food and beverage service; real estate operator and insurance agencies; and construction. The sixth largest, the government sector, is also above the average for the economy. A detailed study of industries, holding establishment size constant along with capital equipment would provide additional insights into factors leading to the proportion of managerial employees. At first glance, we might say that government is in the upper end of the managerial proportions (but well below the top), while other predominantly public sectors such as education and health are at the low end of the managerial scale. What has changed is the actual proportions that managers

TABLE 3
Share of Managers in Each Industry's Labour Force (1931-1961)
and Employment (1971 to 1996)

Year	Total	Primary	Manu.	Cons.	Trans., Comm., & Utilities	Trade	Finance	Public Admin. ^a	Health & Edu. ^b	Business & Personal ^c
1951 OCM										
1931	5.6	0.2	5.2	5.1	4.2	28.9	9.3	8.3	0.2	6.7
1941	5.4	0.2	2.9	3.1	2.8	27.7	9.2	12.4	0.3	6.3
1951	7.5	0.7	5.3	6.5	4.1	25.3	11.1	12.1	0.1	11.7
1961	7.9	1.2	6.3	8.2	5.1	22.0	12.7	9.0	0.1	9.6
1961 OCM										
1961	8.3	1.1	6.4	8.9	5.8	21.8	16.5	6.3	1.2	11.2
1980 SOC (Codes 111 and 113/114)										
1971	2.7	3.2	2.0	1.9	2.1	1.8	4.0	6.5	3.5	1.5
1981	7.0	6.2	5.9	5.3	5.7	9.6	11.5	11.7	3.9	6.3
1986	8.3	7.3	7.4	5.8	6.5	11.3	12.6	13.2	5.3	9.7
1991	9.7	11.6	9.4	7.5	7.6	12.0	14.6	14.8	5.3	8.8
1996	10.2	12.6	8.7	7.8	8.3	11.7	16.3	21.9	6.3	8.6

Source: Noah M. Meltz, *Manpower in Canada, Historical Statistics of the Canadian Labour Force*, pp. 83, 102-105, and Human Resources Development Canada, Special Tabulations.

Notes: a. Listed as Government; b. Listed as Community Service; c. Includes: Business, Recreational and Personal Services.

have represented. With the exception of trade, and to a lesser extent business and personal service, there has been an upward trend in the proportion that managers represent of employment in most industries.

Table 4 contains the number of managers in each industry from 1931 to 1996, and Table 5 presents the distribution of managers by industry. As noted earlier, the data for 1971 are suspect and not consistent with either earlier or later figures. Setting 1971 aside, the two largest locations for managers have consistently been trade and manufacturing. While the manufacturing share has fluctuated around a mean of 15.5 to 16.5 percent, the trend is slightly downward. For trade, there has been a sharp decline from over 50 percent in the 1930s and 1940s, to less than 20 percent on an SOC 1980 basis and less than 30 percent on an NOC 1991 basis. The sectors that have taken up the share relinquished by trade are public administration, business and personal service, health and education, and primary. These data show another dimension of the larger share of managers in most industries, that the base of managers has been broadening well beyond the trade and manufacturing industries in which they were concentrated before the Second World War.

TABLE 4
Numerical Distribution by Industry of Managerial Labour Force (1931-1961)
and Employment (1971-1996), Census of Canada

Year	Total ^{a,b,g}	Primary	Manu.	Cons.	Trans., Comm., & Utilities	Trade	Finance	Public Admin. ^d	Health & Edu. ^{e,f}	Business & Personal ^f
1951 OCM										
1931	219,753	3,070	37,247	12,828	12,683	112,178	8,547	9,109	467	23,624
1941	225,551	2,897	28,222	6,773	8,153	128,703	8,241	16,947	664	24,787
1951	392,896	7,972	71,535	22,660	19,210	179,860	15,915	28,216	437	47,091
1961	500,911	10,475	92,791	38,123	26,933	209,023	29,139	36,258	389	57,435
1961 OCM										
1961	539,040	10,072	89,872	38,418	34,663	215,970	37,704	30,340	7,738	71,373
1980 SOC (Codes 111 and 113/114)										
1971	219,073	23,735	34,863	10,036	14,347	22,743	15,062	44,383	39,697	13,985
1981	746,610	47,768	120,660	35,670	50,100	175,203	68,401	89,904	61,682	97,223
1986	965,550	56,464	148,726	37,634	59,340	228,230	82,930	118,854	84,453	148,918
1991	1,260,325	91,062	175,263	58,625	75,455	269,608	112,861	154,388	112,813	210,251
1996	1,403,764	101,644	181,481	56,811	84,890	274,031	127,703	188,436	142,033	246,735

Source: Noah M. Meltz, *Manpower in Canada, Historical Statistics of the Canadian Labour Force*, pp. 83, 102-105; Ostry (1967); and Human Resources Development Canada, Special Tabulations.

Notes: a. Includes 164 in Industry Unspecified; b. Includes 345 in Industry Unspecified;

c. In 1931 Community, Health and Education were combined; Separate figures were estimated using the shares in 1941; d. Listed as Government; e. Listed as Community Service; f. Includes Business, Recreational and Personal Services; g. Includes: 2,890 Managers in Unspecified Industries;

h. 1961 Occupation and 1961 Industry Classifications.

TABLE 5
Percentage Distribution by Industry of Managerial Labour Force (1931-1961) and
Employment (1971-1996), Census of Canada (Selected Occupational Classification)

Year	Total ^a	Primary	Manu.	Cons.	Trans., Comm., & Utilities	Trade	Finance	Public Admin. ^b	Health & Edu. ^c	Business & Personal ^d
1951 OCM										
1931	100	1.4	16.9	5.8	5.8	51.0	3.9	4.1	0.2	10.8
1941	100	1.3	12.5	3.0	3.6	57.1	3.7	7.5	0.3	11.0
1951	100	2.0	18.2	5.8	4.9	45.8	4.1	7.2	0.1	12.0
1961	100	2.1	18.5	7.6	5.4	41.7	5.8	7.2	0.1	11.5
1961 OCM										
1961	100	1.9	16.7	7.1	6.4	40.1	7.0	5.6	1.4	13.2
1980 SOC										
1971	100	10.8	15.9	4.6	6.5	10.4	6.9	20.3	18.1	6.4
1981	100	6.4	16.2	4.8	6.7	23.5	9.2	12.0	8.3	13.0
1986	100	5.8	15.4	3.9	6.1	23.6	8.6	12.3	8.7	15.4
1991	100	7.2	13.9	4.7	6.0	21.4	9.0	12.2	9.0	16.7
1996	100	7.2	12.9	4.0	6.0	19.5	9.1	13.4	10.1	17.6

Source: Noah M. Meltz, *Manpower in Canada, Historical Statistics of the Canadian Labour Force*, pp. 83, 102-105; Table 4.

Notes: a. Percentage Distribution. Excludes Industry Unspecified; b. Listed as Government; c. Listed as Community Service; d. Includes Business, Recreational and Personal Services.

5. Shift-Share Analysis of Sources of Change in Managers in Canada

In this section we examine the sources of change in the proportion that managers represented of the total workforce in Canada since 1931. Although we are able to extend the estimates of the number of managers back to 1901, the earliest we can provide estimates of occupation by industry is 1931 (Meltz 1965 and 1969).

The method of analysis that is used is termed shift-share. What is being done is to decompose the changes in the proportion of an occupation in the workforce into two components: the composition effect, which is the composition of the workforce by industry; and the incidence effect, the percent of managers within each industry. In addition, a residual effect was calculated for the shift-share estimates for the period 1971 to 1996, but this residual was distributed among the other two effects, after adjustments to each. For the period 1931 to 1961, the use of four separate calculations and the averaging of the results distributed the residuals among the components. A third component, the impact on an occupation's share of employment of productivity change, was also added to the shift-share analysis for 1931-1961 (Meltz 1965).

5.1 Shift-share analysis of managers, 1931 to 1961

Between 1931 and 1961, the proportion of managers in the workforce increased from 5.6 to 7.9 percent, an increase of 2.3 percentage points. To understand the sources of this change we have undertaken several types of shift-share analysis. The first considers three factors: the composition effect, which in the original analysis was decomposed into two components; the industrial distribution of employment and the productivity of each industry; and the incidence effect, which in the original analysis was termed the occupational share of each industry (for methodology see Meltz 1965, pp. 71-79). Table 6 summarizes the shift-share analysis prepared by Meltz (1965). Note that in Meltz (1965) the figures relate to employment not the labour force. Employment estimates were prepared in order to incorporate the effect of the distribution of output by industry and labour productivity by industry. The combination of these two effects is the equivalent of what is now termed the composition effect or the change in employment by industry. The

estimates of employment raise the increase in the share of managers in employment between 1931 and 1961 from 2.3 percentage points to the 2.5 percentage points shown in Table 6.

TABLE 6
Shift-Share Analysis of the Sources of Change in the Managerial Proportion of Employment in Canada, 1931-1961

Net Change	Amount of Net Change in Proportion of Employment Arising From:			
	Industrial Share of Output	Productivity in Each Industry	Total Composition	Incidence
2.5	0.8	1.0	1.8	0.7

Source: Noah M. Meltz, *Changes in the Occupational Composition of the Canadian Labour Force, 1931-1961*, p. 80.

The results presented in Table 6 indicate that the composition effect, that is, the change in the distribution of employment among industries increased the managerial share of total employment by 1.8 out of a total increase of 2.5 percentage points. That is, 72 percent of the increase in the share of managers came from composition changes and 28 percent (0.7 percentage points) came from the increased incidence of managers. Within the composition effect, the largest portion, 1.0 percentage points, came from the impact of productivity changes within the industries that have the largest number of managers. A positive impact of productivity means that, on balance, productivity was growing at a slower rate than the average in the industries in which managers are located. In particular, productivity (real domestic product per employee) in trade, an industry containing over half of the managers in Canada, grew at only one-third the rate of the economy as a whole (Meltz 1965, p. 88). When productivity is growing more slowly than average, a given increase in the output of an industry will create more employment than if productivity were growing at a greater rate than the economy as a whole.

The positive contribution of the industry share of output means that output grew at an above average rate in the industries in which managers were concentrated. In this case the biggest impact came from the growth of manufacturing, the second greatest concentration of managers. Between 1931 and 1961 manufacturing grew from a depression low of 20.8 percent of total real domestic product to 28.8 percent. This gain of 8.0 percentage points was by far the largest increase in the share of output in an industry sector in this period. The next largest gain was in utilities, an increase of 2.6 percent. Trade did experience some growth at 0.5 percentage points, which also contributed to the growth of managers.

The incidence change for managers was almost across the board. Of the thirteen industry groups for which comparable data were available, managers increased of employment in ten of them. The only decreases were in trade and recreation (Meltz 1965, p. 92).

An alternative approach to understanding the sources of change in the share of managers in the total workforce is presented in Table 7. This table combines the composition and incidence effects and pinpoints the net contribution of each industry to the overall change in the proportion of managers. The results show that the five largest contributors to managerial growth were manufacturing and trade, followed by personal service, construction and finance. These five industries accounted for 80 percent of the growth of managers over the three decades. Which industries contribute the most to net managerial growth is important because, as will be seen, the socioeconomic characteristics of managers differ markedly among industries.

5.2 Shift-share analysis of managers, 1971 to 1996

The Occupational Projections and Macroeconomic Studies Section of the Applied research Branch of Human Resources Development Canada has prepared a shift share analysis of the change in managers for the intercensal periods between 1971 and 1996. The results are shown in Table 8 for compositional, incidence and residual effects for 1971-1981, 1981-1991, 1986-1996, and 1971-1996, on a 1980 SOC classification of managers by industry sector, for occupation codes 111, Officials and Administrators Unique to Government, and Other Managers and Administrators, codes 113/114.

The data in Table 8 show that in each of the sub-periods, as well as from 1971 to 1996 overall, the largest source of the increase in managers in the Canadian workforce was due to incidence changes, that is the increase in the share of managers within industries. The impact of the incidence changes far exceeds what occurred in the period 1931-1961. Whereas incidence changes contributed 28 percent to growth of managers between 1931 and 1961, incidence changes contributed 100 percent to the increases in the proportion of managers in the workforce between 1971 and 1996. This suggests that there was either much more stability in the distribution of employment by industries during this period and/or that the changes in distribution offset each other so that the major factor responsible for the increase in the proportion of managers was the increase in the share of managers within industries. When the shift-share

analysis is broken down by major industry group (data are available but not shown here), the composition effects were stronger than incidence effects only in business services, for the periods 1981-91, 1986-96, 1971-96.

TABLE 7
Managerial Occupations by Industry Sector Distribution
Share and Source of Change, 1931-1961

Industry	Distribution of Managers		Managerial Share of Industry		Source of Change in Managerial Share 1931-1961	Percent of Change in Managerial Share
	1931	1961	1931	1961		
Goods						
Agriculture	-	0.4	-	0.3		
Forestry	0.9	0.9	1.9	4.0	0.03	1
Fishing	*	0.1	*	1.2	0.03	1
Mining	0.5	0.8	1.7	3.3	0.03	1
Manufacturing	17.0	18.5	5.2	6.3	0.51	22
Electricity,gas, water	0.4	0.8	3.8	5.5	0.04	2
Construction	5.8	7.6	5.1	8.2	0.27	12
Services						
Transportation &Communication	5.3	4.6	4.2	5.1	0.06	3
Trade	51.1	41.7	28.9	22.0	0.44	19
Wholesale	5.2	10.5	18.7	17.9		
Retail	45.9	31.3	30.9	23.8		
Finance	3.9	5.8	9.3	12.7	0.24	10
Service	15.1	18.8	4.8	5.7		
Community	0.2	0.1	0.2	0.1	0.03	1
Business	**	0.4	**	1.5	**	
Government	4.2	7.2	8.3	9.0	0.34	15
Recreation	2.1	1.4	19.2	17.9	0.01	***
Personal	8.6	9.7	5.9	11.0	0.29	12
Industry- Unspecified	-	0.1	-	0.2	0.01	***
All Industries:	100.0	100.0	5.6	7.9	2.33	100

Source: Noah M. Meltz, *Manpower in Canada 1931-1961*, Historical Statistics of the Canadian Labour Force, calculations by the author.

Note: Numbers may not add to 100 due to rounding.

* Forestry & Fishing Combined

** Community & Business Combined

*** Less than 0.5

TABLE 8
Decomposition of Change in Selected Managerial Groups, 1971 to 1996, Selected Periods, Percentages

SOC 111: Officials & Administrators Unique to Government

Total Change	Composition	Incidence	Total Change	Composition	Incidence
1971 - 1981			1981 - 1991		
0.06	-0.08	0.13	0.18	0.08	0.10
1986 - 1996			1986 - 1996		
0.16	-0.05	0.20	0.29	-0.09	0.37

SOC 113/114: Other Managers and Administrators

Total Change	Composition	Incidence	Total Change	Composition	Incidence
1971 - 1981			1981 - 1991		
4.22	0.07	4.15	2.54	-0.04	2.58
1986 - 1996			1971 - 1996		
1.55	-0.02	1.57	6.97	-0.01	6.98

Source: Human Resources Development Canada, Special Tabulations.

Note: Figures may not add to totals due to rounding.

A separate calculation was made to determine the combined effect of composition and incidence changes by industry group between 1981 and 1996. This period was chosen because, as discussed earlier, the data on the number of managers in 1971 is suspiciously low. Table 9 indicates that there was a much broader range of industries contributing to the increase in the number and proportion of managers between 1981 and 1996, than was the case for the period 1931 to 1961. In both periods the net increase in the share of managers was respectively: 2.3 percentage points in 1931 to 1961, and 3.2 percentage points between 1981 and 1996. The recent broader range of industry contributions to the growth of managers is illustrated by the largest five sectors which contributed only 69 percent of the growth in managers between 1981 and 1996, whereas the top five sectors contributed 80 percent of the growth from 1931 to 1961. As Table 9 shows, most recently trade was the largest contributor to managerial growth, but it was equaled by business services. Finance, insurance and real estate, and health followed this. Manufacturing was among the groups making the lowest contribution to the net increase in managers, whereas in the earlier period it contributed the most.

In the case of government officials, the largest factor contributing to the employment was the increase in the incidence (the proportion that managers represented in public administration). For three of the four periods shown in the table, the positive incidence offset the negative composition

effects, that is, if incidence had not increased, the decreasing share of public administration employment would have decreased the overall share of government managers.

TABLE 9
Managerial Occupations by Industry Sector, Distribution,
Share and Source of Change, 1981-1996

Industry	Distribution of Managers		Managerial Share of Industry		Source of Change in Managerial Share	Percent of Change in Managerial Share
	1981	1996	1981	1996	1981-1996	
Goods						
Agriculture	4.8	5.3	7.7	14.1	0.2	9
Forestry	-	0.1	1.1	2.9	-	-
Fishing	0.2	0.3	2.1	5.7	-	-
Mining	1.4	1.0	5.2	8.3	-	-
Manufacturing	16.2	13.0	5.9	8.4	0.1	4
Services						
Construction	4.8	4.4	5.3	7.7	0.1	4
Transportation & Communication	5.9	4.8	5.8	6.9	-	-
Utilities	0.8	1.0	5.1	8.9	-	-
Trade	23.5	21.8	9.6	11.5	0.4	17
Wholesale						
Retail						
Finance, Insurance, Real Estate	9.2	9.5	12.0	15.3	0.3	13
Business Service	4.1	7.6	6.8	10.6	0.4	17
Government	12.0	8.8	11.7	12.9	-	-
Education	5.3	5.2	5.3	6.6	0.1	4
Health	3.0	5.2	2.7	4.7	0.3	13
Accommodation & Food	5.2	6.4	6.7	8.8	0.2	9
Amusement	0.9	1.6	6.1	8.1	-	-
Personal & Household	0.5	0.7	2.0	3.2	0.1	4
Other Services	2.3	3.3	7.6	8.4	0.1	4
All Industries:	100.0	100.0	7.0	9.2	2.2	100

Source: Human Resources Development Canada, Special Tabulations. Calculations by the author.

Note: Source of change is approximate due to rounding. Adding the rounded figures would result in 2.3, over all industries.

5.3 Summary of sources of growth in the share of managers

In the past several decades what has been important for the growth of managers in the Canadian workforce has been the increasing share that managers represent in virtually every industry. This is a significant finding, not only for understanding the general trends in managers, but also for considering whether this trend is likely to continue and, if so, whether it will continue at the same pace. What has caused this deepening in the managerial function across most industries, with the exception of managers in retail trade, has been a combination of new technologies, a change in

the structure of organizations and the trend toward smaller establishments. Will all of these trends continue in the future, and continue to drive the share of managers in the workforce? One can only speculate on future developments, but it appears that at least for next decade the speed of technological change and the global restructuring that is taking place will continue to put a premium on managerial skills, albeit performing functions that will change over time. This in turn will have a big impact on the education and training needed by people in managerial positions and for those being recruited for managerial positions. All of this emphasizes the central role that shift-share analysis can play in understanding past occupational trends and in projecting future patterns.

6. Formal Educational Levels of Managers in 1996: More and Less

Education levels are key considerations in planning for the future of managers in Canada. Along with professional occupations, managers have the highest levels of education. Table 10 presents a breakdown of the educational levels of managers by industry. Three groupings of education are presented:

- **University degree or certificate** – a combination of Ph.D., MA, first professional degree or certificate above bachelor, and bachelor or certificate below bachelor;
- **Trades certificate or non-university certificate;**
- **Secondary school graduation or less** – secondary school graduation diploma; and no degree certificate or diploma.

TABLE 10
Managerial Occupations in the Experienced Labour Force by Industry Division (1980 SIC),
Occupation (1991 SOC) and by Educational Attainment, 1996 Census.

Industry	Managerial Labour Force	Percent Distribution by Education Attainment		
		University degree or certificate	Trades certificate or non-university certificate	Secondary school graduation or less
Agriculture	3,125	32.5	28.0	39.5
Fishing & Trapping	620	30.4	23.8	45.9
Logging & Forestry	4,235	25.7	24.7	49.3
Mining, Quarry & Oil Wells	11,815	43.8	25.2	31.0
Manufacturing	152,615	36.6	29.5	33.9
Construction	85,265	14.9	37.8	47.3
Transportation & Storage	32,100	24.0	28.9	47.0
Communication & Utilities	36,155	39.9	30.1	36.0
Wholesale Trade	104,595	28.7	27.7	43.7
Retail Trade	265,135	15.7	28.4	55.9
Finance & Insurance	83,580	43.5	22.9	33.6
Real Estate & Insurance Agents	28,770	35.1	33.3	31.6
Business Services	83,320	53.5	24.7	21.7
Government Services	91,645	52.8	24.3	23.1
Educational Services	52,520	79.1	11.2	9.7
Health & Social Services	48,620	55.5	30.9	13.7
Accommodation & Food	125,895	15.4	27.2	57.4
Other Services	79,120	29.4	31.2	39.3
Total Managerial	1,289,120	32.6	27.7	39.7
Total Labour force	14,317,545	20.0	29.9	50.3

Source: Statistics Canada, Special Tabulations.

It should also be noted that the 1991 SOC contains four different groupings within the managerial categories that are identified: senior managers; managers in retail trade, food and accommodation; specialist managers; other managers.

- **Senior managers** – includes government officials and chief executive officers;
- **Managers in retail trade, food and accommodation** – includes managers of retail trade, food services and accommodations, primarily in the industries of the same name, but also in other industries that contain retail sales functions, as well as food dispensing and the provision of accommodations. Of the total of 424,105 persons in this managerial category in 1996, 356,975 representing 84 percent of the total, were in the two industries: retail trade (237,395), and accommodation, food and beverage services (119,580). The remaining sixteen percent (67,130) of these managers were located in other industries, with the largest numbers in other services (23,495), wholesale trade (18,905, and manufacturing (8,620);
- **Specialist managers** – financial managers, human resource managers, information system and data processing managers, sales managers, etc.;
- **Other managers.**

For the managerial group as a whole in 1996, almost one third (32.6 percent) had a university degree or certificate, forty percent (39.7 percent) had secondary school completion or less education, and under one-third (27.7 percent) had trades certificate or a non-university certificate (Table 10). When data on managers by level of education by age are examined, the data clearly show that younger managers had higher levels of education than the older managers. Moreover when comparing 1991 and 1996, there has been an acceleration in the trend toward younger managers being more educated.

The biggest differences in educational levels occur among industry sectors. Not surprisingly, a very high percentage of managers in the education sector have a degree (79.1), whereas only 14.9 percent of managers in construction had a degree. The two other industry sectors with the least educated managers contain the largest concentration of employees designated as managers: retail trade and accommodation and food services. Of the 356,975 managers in these two sectors, representing 30 percent of all managers, only 15 percent (15.7 and 15.4 percent respectively) have a degree, and over 50 percent have high school or less education.

By contrast, over half of the workers in business services, government services and health and social services have a degree. These sizeable educational differences are important for considerations of career opportunities as well as for productivity, training and upgrading.

Table 11 shows the changes that have taken place between 1991 and 1996 in the extent of educational attainment of the workforce as a whole, as well as for the managers and the four categories of managers. It should be noted that the numbers of managers shown in Table 15 are from the population censuses of those years. What is perhaps surprising is that the number of managers in the experienced work force in 1991 is greater than the number in 1996. These numbers are included in Table 1, but were not discussed at that point. Also shown in Table 1 is the number of managers estimated for those years by the Labour Force Survey, which indicates an increase in the number of managers in the labour force and the number employed.

The apparent conflict over whether the number of managers increased between 1991 and 1996, or decreased, is the subject of an analysis being undertaken by Statistics Canada. It was noted earlier (see above and The Appendix), that the 1971 census figures of the number of managers seems to be understated for two reasons. First, there was a change in the classification of managers; and second, because of census coding instructions that a person was only to be included in the managerial category if he or she had an income in excess of \$25,000. Some preliminary figures prepared by the author suggest that the number of managers in the 1991 census may be overstated. This is just a preliminary observation, subject to the more detailed analysis being conducted by Statistics Canada. What it means for the discussion of education data is that caution should be exercised in looking at the changes in the numbers of people in the various categories. We confine our comments to the proportions of people who have attained various levels of schooling.

Between 1991 and 1996 the proportion of managers who had a university degree rose by twelve percent from 29.0 (9.0+20.0) to 32.6 (10.2+22.4) (Table 11). While this is a sizeable increase, it is lower than the eighteen percent increase in the proportion of the entire labour force with degrees. This means that the deepening of higher education for the entire work force was occurring faster than within the managerial group. A similar development took place within the managerial group itself. The percentage of managers in retail trade, food, etc. with degrees went

TABLE 11
Managerial Occupations in the Experienced Canadian Labour Force, for All Industries
By Industry Division (1980 SIC), Occupation (1991 SOC), Highest Degree and Sex, 1991 and 1996 Censuses Population

	Both sexes							
	Number of persons		Change 1991-1996		Percent of all degrees		Percent of all occupation	
	1991		Number	Percent		1996	1991	
All occupations (1991 soc)	14,220,230		97,315		100.0		100.00	
PhD, MA, first professional degree or certificate above bachelor	714,580	840,665	126,085	17.6	5.0	5.9	100.00	100.00
Bachelor or certificate below bachelor	1,695,675	2,021,235	325,560	19.2	11.9	14.1	100.00	100.00
Trades certificate or other non-university certificate	3,930,050	4,279,720	349,670	8.9	27.6	29.9	100.00	100.00
Secondary school graduation diploma	3,665,745	3,628,400	-37,345	-1.0	25.8	25.3	100.00	100.00
No degree certificate or diploma	4,114,185	3,547,525	-666,660	-15.8	29.6	24.8	100.00	100.00
A Management occupations	1,383,410	1,289,120	-94,290	-6.8	100.0	100.0	9.73	9.00
All degrees								
PhD, MA, first professional degree or certificate above bachelor	124,395	131,090	6,695	5.4	9.0	10.2	17.41	15.59
Bachelor or certificate below bachelor	276,070	289,135	13,065	4.7	20.0	22.4	16.28	14.30
Trades certificate or other non-university certificate	369,930	358,135	-11,795	-3.2	26.7	27.8	9.41	8.37
Secondary school graduation diploma	344,285	304,980	-39,305	-11.4	24.9	23.7	9.39	8.41
No degree certificate or diploma	268,725	205,790	-62,935	-23.4	19.4	16.0	6.38	5.80
A0 Senior management occupations	139,265	145,185	5,920	4.3	100.0	100.0	0.98	1.01
All degrees								
PhD, MA, first professional degree or certificate above bachelor	21,810	24,275	2,465	11.3	15.7	16.7	3.05	2.89
Bachelor or certificate below bachelor	36,540	40,130	3,590	9.8	26.2	27.6	2.15	1.99
Trades certificate or other non-university certificate	32,600	35,095	2,495	7.7	23.4	24.2	0.83	0.82
Secondary school graduation diploma	27,775	27,080	-695	-2.5	19.9	18.7	0.76	0.75
No degree certificate or diploma	20,540	18,600	-1,940	-9.4	14.7	12.8	0.49	0.52
A1 Specialist managers	308,390	282,115	-26,275	-8.5	100.0	100.0	2.17	1.97
All degrees								
PhD, MA, first professional degree or certificate above bachelor	36,385	34,105	-2,280	-6.3	11.8	12.1	5.09	4.06
Bachelor or certificate below bachelor	91,045	86,870	-4,175	-4.6	29.5	30.8	5.37	4.30
Trades certificate or other non-university certificate	82,105	78,610	-3,495	-4.3	26.6	27.9	2.09	1.84
Secondary school graduation diploma	66,045	55,575	-10,470	-15.9	21.4	19.7	1.80	1.53
No degree certificate or diploma	32,815	26,950	-5,865	-17.9	10.6	9.6	0.78	0.76
A2 Managers in retail trade food etc.	474,385	424,105	-50,280	-10.6	100.0	100.0	3.34	2.96
All degrees								
PhD, MA, first professional degree or certificate above bachelor	10,035	11,215	1,180	11.8	2.1	2.6	1.40	1.33
Bachelor or certificate below bachelor	49,235	55,000	5,765	11.7	10.4	13.0	2.90	2.72
Trades certificate or other non-university certificate	125,190	121,060	-4,130	-3.3	26.4	28.5	3.19	2.83
Secondary school graduation diploma	151,360	135,430	-15,930	-10.5	31.9	31.9	4.13	3.73
No degree certificate or diploma	138,560	101,405	-37,155	-26.8	29.2	23.9	3.29	2.86
A3 Other managers n.e.c.	461,370	437,720	-23,650	-5.1	100.0	100.0	3.24	3.06
All degrees								
PhD, MA, first professional degree or certificate above bachelor	56,165	61,490	5,325	9.5	12.2	14.0	7.86	7.31
Bachelor or certificate below bachelor	99,250	107,125	7,875	7.9	21.5	24.5	5.85	5.30
Trades certificate or other non-university certificate	130,040	123,365	-6,675	-5.1	28.2	28.2	3.31	2.88
Secondary school graduation diploma	99,105	86,895	-12,210	-12.3	21.5	19.9	2.70	2.39
No degree certificate or diploma	76,810	58,840	-17,970	-23.4	16.6	13.4	1.82	1.66
B011-J319 All other occupations	12,836,820	13,028,420	191,600	1.5	100.0	100.0	90.27	91.00
All degrees								
PhD, MA, first professional degree or certificate above bachelor	590,185	709,580	119,395	20.2	4.6	5.4	82.59	84.41
Bachelor or certificate below bachelor	1,419,610	1,732,100	312,490	22.0	11.1	13.3	84.72	85.70
Trades certificate or other non-university certificate	3,560,120	3,921,585	361,465	10.2	27.7	30.1	90.59	91.63
Secondary school graduation diploma	3,321,460	3,323,420	1,960	0.1	25.9	25.5	90.61	91.59
No degree certificate or diploma	3,945,460	3,341,735	-603,725	-15.3	30.7	25.6	93.62	94.20

up by twenty-six percent, far more than for any other managerial group. In fact the higher the percentage of highly-educated among the managerial group, the smaller the rate of increase in the proportion with degrees.

This suggests that there is a narrowing in the differences among managerial groups in the average level of education. What it doesn't do is indicate the specific types of education. We have already observed that there is an enormous interest in business/managerial education at the undergraduate level and especially at the graduate (MBA) level. What is needed is to examine the differences in the types of education of managers in the various industries. We know that there has been an evolution in the background preparation for managerial positions, both in broadening the range of skills that managers are given, especially in computer and information technology and financial analysis. What remains to be considered is what further changes will take place in managerial education and training.

7. Earnings Levels of Managers in 1996: Big Differences

Managers as a group have always had the highest levels of earnings of any major occupation group (Meltz, 1969, p. 241). The historical data we have shows that average wage and salary earnings of managers were more than three times the earnings of the workforce as a whole in 1931 (3.36) and almost three times the overall average in 1941 (2.79). While the relative trend of managerial employment income as compared with the overall average was downward over time, in 1961 managers were still earning more than twice the average (2.03) (Meltz 1969, p. 246). More recent data show that the relative gap narrowed further in the 1980s. In 1985 the figure was 1.74 using the 1980 SOC definition of all managers, and 1.65 in 1990. Given the enormously strong Canadian economy in the 1980s, with low unemployment rates especially in Ontario, it is not surprising that the gap narrowed. If we focus only on the largest category, Other Managers codes 113/114, the figures were a slightly higher 1.82 and 1.71 in 1985 and 1990, respectively. If we consider only those who worked full-time, full year, the gap was an even more modest 1.36 and 1.33 for 1985 and 1990 employment earnings respectively (Statistics Canada 1993b).

For the most recent period, that is 1991 (1990 income) and 1996 (1995 income) on the 1991 SOC classification base, the relative full-time employment earnings of managers as a whole are only somewhat above the overall average (1.38 and 1.39 respectively), as shown in Table 12. However, when we look at senior managerial positions, the ratio in relation to the total rises to 2.20 and 2.27 for 1991 and 1996 respectively. Probing further, Table 12 indicates the wide range in earnings among managers in different industries. The top managerial employment income industries in 1996 were: mining, quarrying and oil wells; fishing and trapping; logging and forestry; finance and insurance and manufacturing. The lowest managerial income industries for 1996 were: accommodation food and beverage services; retail trade; other services; agriculture; and construction. Health and Social services are just above construction, but still in the lowest sixth of industrial earned income of managers. Managers in mining quarrying and oil wells earn almost three times what managers in retail trade earn, and three and a half times that of managers in accommodation, food and beverages. Of the 18 industry sectors for which managers in retail trade, food, etc. are identified, less than half have earnings equal or greater than the national average.

TABLE 12
Persons 15 Years and Over Who Worked Full-Time, Full-Year
by Industry Division (1980 SIC), Managerial Occupations (1991 SOC), Highest Degree and Sex,
Showing Number of Persons and Average Employment Income, Census of Population, 1991 and 1996, Canada

	Both sexes				Male				Female			
	Average employment income		Ratio to overall average income		Average employment income		Ratio to overall average income		Average employment income		Ratio to overall average income	
	1991	1996	1991	1996	1991	1996	1991	1996	1991	1996	1991	1996
All occupations (1991 soc)												
A All industries (1980 sic)	37,652	37,556	1.00	1.00	43,162	42,488	1.00	1.00	29,074	30,130	1.00	1.00
A agriculture & related services	22,490	21,154	0.60	0.56	24,603	22,795	0.57	0.54	16,375	16,717	0.56	0.55
B fishing & trapping	34,123	36,115	0.91	0.96	35,930	37,960	0.83	0.89	25,222	28,386	0.87	0.94
C logging & forestry	42,816	44,526	1.14	1.19	44,671	46,363	1.03	1.09	31,924	33,787	1.10	1.12
D mining quarrying & oil wells	54,488	57,126	1.45	1.52	57,504	59,922	1.33	1.41	37,835	41,058	1.30	1.36
E manufacturing	38,911	40,178	1.03	1.07	42,999	43,982	1.00	1.04	27,183	28,728	0.93	0.95
F construction	40,506	36,688	1.08	0.98	42,226	37,968	0.98	0.89	28,546	27,663	0.98	0.92
G transportation & storage	39,835	39,356	1.06	1.05	41,803	41,013	0.97	0.97	29,738	31,047	1.02	1.03
H communication & other utilities	43,718	44,151	1.16	1.18	48,052	47,780	1.11	1.12	34,236	36,522	1.18	1.21
I wholesale trade	38,558	38,894	1.02	1.04	42,389	42,124	0.98	0.99	27,927	29,913	0.96	0.99
J retail trades	28,984	27,205	0.77	0.72	33,658	30,974	0.78	0.73	22,087	21,710	0.76	0.72
K finance & insurance	39,353	43,822	1.05	1.17	56,018	62,671	1.30	1.48	29,747	32,738	1.02	1.09
L real estate operators & insurance agents	40,392	37,748	1.07	1.01	47,617	44,257	1.10	1.04	31,496	30,381	1.08	1.01
M business services	46,076	45,134	1.22	1.20	55,398	52,537	1.28	1.24	32,073	33,589	1.10	1.11
N government services	42,604	42,771	1.13	1.14	47,136	46,967	1.09	1.11	34,878	36,202	1.20	1.20
O educational services	44,557	44,690	1.18	1.19	50,411	49,404	1.17	1.16	39,566	40,961	1.36	1.36
P health & social services	37,012	37,201	0.98	0.99	54,494	54,851	1.26	1.29	31,271	31,792	1.08	1.06
Q accommodation food & beverage services	22,058	20,496	0.59	0.55	26,497	23,889	0.61	0.56	18,121	17,367	0.62	0.58
R other services	27,673	27,434	0.73	0.73	34,063	32,392	0.79	0.76	21,482	22,413	0.74	0.74
A Management occupations												
A All industries (1980 sic)	51,859	52,068	1.38	1.39	57,727	57,796	1.34	1.36	35,781	38,136	1.23	1.27
A agriculture & related services	40,140	46,904	1.07	1.25	44,051	53,983	1.02	1.27	27,112	29,734	0.93	0.99
B fishing & trapping	43,998	70,932	1.17	1.89	47,409	74,668	1.10	1.76	xxx	xxx	xxx	xxx
C logging & forestry	65,457	69,614	1.74	1.85	66,788	70,974	1.55	1.67	xxx	xxx	xxx	1.88
D mining quarrying & oil wells	90,119	98,716	2.39	2.63	93,592	102,250	2.17	2.41	56,058	66,271	1.93	2.20
E manufacturing	62,420	68,063	1.66	1.81	65,777	71,979	1.52	1.69	42,382	47,285	1.46	1.57
F construction	59,334	48,539	1.58	1.29	60,618	49,286	1.40	1.16	40,338	36,037	1.39	1.20
G transportation & storage	58,091	59,263	1.54	1.58	60,319	61,952	1.40	1.46	41,437	44,230	1.43	1.47
H communication & other utilities	63,976	64,656	1.70	1.72	68,209	69,190	1.58	1.63	49,555	52,534	1.70	1.74
I wholesale trade	57,316	59,565	1.52	1.59	60,077	62,137	1.39	1.46	39,873	44,747	1.37	1.49
J retail trades	35,672	33,418	0.95	0.89	41,058	38,296	0.95	0.90	25,161	24,540	0.87	0.81
K finance & insurance	62,574	68,359	1.66	1.82	73,370	83,663	1.70	1.97	43,590	47,483	1.50	1.58
L real estate operators & insurance agents	60,101	59,443	1.60	1.58	66,650	66,716	1.54	1.57	42,164	43,751	1.45	1.45
M business services	65,553	64,576	1.74	1.72	71,846	69,812	1.66	1.64	45,141	49,079	1.55	1.63
N government services	57,991	56,221	1.54	1.50	60,983	58,754	1.41	1.38	48,156	49,229	1.66	1.63
O educational services	59,937	60,266	1.59	1.60	64,650	64,883	1.50	1.53	50,329	53,381	1.73	1.77
P health & social services	48,812	50,959	1.30	1.36	58,776	60,884	1.36	1.43	42,493	45,185	1.46	1.50
Q accommodation food & beverage services	29,751	27,852	0.79	0.74	33,825	31,187	0.78	0.73	23,625	22,844	0.81	0.76
R other services	40,750	41,104	1.08	1.09	47,186	46,196	1.09	1.09	29,418	32,156	1.01	1.07

TABLE 12 (continued)

	Both sexes				Male				Female			
	Average employment income		Ratio to overall average income		Average employment income		Ratio to overall average income		Average employment income		Ratio to overall average income	
	1991	1996	1991	1996	1991	1996	1991	1996	1991	1996	1991	1996
A0 Senior management occupations												
All industries (1980 sic)	82,992	85,362	2.20	2.27	88,557	91,867	2.05	2.16	50,977	55,324	1.75	1.84
A agriculture & related services	48,196	68,382	1.28	1.82	52,707	70,468	1.22	1.66	xxx	xxx	xxx	xxx
B fishing & trapping	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
C logging & forestry	91,154	103,977	2.42	2.77	91,956	104,930	2.13	2.47	xxx	xxx	xxx	xxx
D mining quarrying & oil wells	161,461	150,915	4.29	4.02	163,952	152,337	3.80	3.59	xxx	xxx	xxx	xxx
E manufacturing	91,953	105,485	2.44	2.81	95,009	110,878	2.20	2.61	55,746	57,036	1.92	1.89
F construction	84,658	73,276	2.25	1.95	86,076	74,355	1.99	1.75	55,794	45,466	1.92	1.51
G transportation & storage	85,698	85,073	2.28	2.27	87,968	87,465	2.04	2.06	53,961	57,884	1.86	1.92
H communication & other utilities	97,425	107,214	2.59	2.85	102,363	113,336	2.37	2.67	56,984	71,905	1.96	2.39
I wholesale trade	89,850	90,332	2.39	2.41	93,273	93,273	2.16	2.20	52,464	57,404	1.80	1.91
J retail trades	68,750	67,915	1.83	1.81	73,269	73,129	1.70	1.72	40,800	43,754	1.40	1.45
K finance & insurance	115,200	134,095	3.06	3.57	121,632	145,444	2.82	3.42	69,087	82,843	2.38	2.75
L real estate operators & insurance agents	102,263	102,277	2.72	2.72	110,855	105,921	2.57	2.49	58,621	85,423	2.02	2.84
M business services	88,047	82,329	2.34	2.19	94,105	86,273	2.18	2.03	55,447	62,348	1.91	2.08
N government services	63,523	58,844	1.69	1.57	68,176	63,850	1.58	1.50	49,686	47,560	1.71	1.58
O educational services	63,944	65,628	1.70	1.75	71,891	73,172	1.67	1.72	47,384	54,066	1.63	1.79
P health & social services	64,790	68,079	1.72	1.81	75,415	81,715	1.75	1.92	50,586	55,531	1.74	1.84
Q accommodation food & beverage services	60,937	63,419	1.62	1.69	67,596	67,138	1.57	1.58	37,199	50,171	1.28	1.67
R other services	67,610	67,640	1.80	1.80	73,199	74,696	1.70	1.76	44,593	46,074	1.53	1.53
A1 Specialist managers												
All industries (1980 sic)	58,349	58,235	1.55	1.55	62,543	62,290	1.45	1.47	45,256	47,348	1.56	1.57
A agriculture & related services	44,199	52,235	1.17	1.39	46,575	55,254	1.08	1.30	xxx	xxx	xxx	xxx
B fishing & trapping	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
C logging & forestry	67,939	84,240	1.80	2.24	68,303	92,263	1.58	2.17	xxx	xxx	xxx	xxx
D mining quarrying & oil wells	78,508	81,186	2.09	2.16	82,638	85,882	1.91	2.02	56,074	62,040	1.93	2.06
E manufacturing	60,681	63,148	1.61	1.68	63,563	66,753	1.47	1.57	46,945	49,656	1.61	1.65
F construction	60,722	54,388	1.61	1.45	64,888	57,230	1.50	1.35	43,560	42,223	1.50	1.40
G transportation & storage	57,981	57,132	1.52	1.52	60,165	59,742	1.39	1.41	45,513	47,677	1.57	1.58
H communication & other utilities	65,792	63,400	1.75	1.69	69,940	67,762	1.62	1.59	53,996	54,898	1.86	1.82
I wholesale trade	56,529	56,809	1.50	1.51	58,830	58,824	1.36	1.38	43,253	46,466	1.49	1.54
J retail trades	49,291	45,407	1.31	1.21	52,997	48,465	1.23	1.14	39,578	39,067	1.36	1.30
K finance & insurance	61,914	66,122	1.64	1.76	69,033	77,950	1.60	1.83	48,579	49,952	1.67	1.66
L real estate operators & insurance agents	50,069	50,001	1.33	1.33	55,388	54,356	1.28	1.28	39,229	42,559	1.35	1.41
M business services	63,870	62,391	1.70	1.66	69,808	67,424	1.62	1.59	46,512	48,854	1.60	1.62
N government services	57,504	55,932	1.53	1.49	61,046	59,449	1.41	1.40	48,251	49,034	1.66	1.63
O educational services	55,192	53,051	1.47	1.41	60,357	58,012	1.40	1.37	44,161	45,549	1.52	1.51
P health & social services	49,332	50,872	1.31	1.35	55,114	56,592	1.28	1.33	43,732	46,112	1.50	1.53
Q accommodation food & beverage services	44,156	43,575	1.17	1.16	49,409	45,314	1.14	1.07	37,219	41,189	1.28	1.37
R other services	47,966	45,379	1.27	1.21	53,713	48,803	1.24	1.15	36,886	39,503	1.27	1.31

TABLE 12 (continued)

	Both sexes				Male				Female			
	Average employment income		Ratio to overall average income		Average employment income		Ratio to overall average income		Average employment income		Ratio to overall average income	
	1991	1996	1991	1996	1991	1996	1991	1996	1991	1996	1991	1996
A2 Managers in retail trade food etc.												
All industries (1980 sic)	33,526	31,206	0.89	0.83	38,356	35,511	0.89	0.84	24,328	23,579	0.84	0.78
A agriculture & related services	33,311	25,922	0.88	0.69	37,770	xxx	0.88	xxx	24,588	xxx	0.85	xxx
B fishing & trapping	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
C logging & forestry	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
D mining quarrying & oil wells	65,200	xxx	1.73	xxx	67,472	xxx	1.56	xxx	xxx	xxx	xxx	xxx
E manufacturing	44,367	43,647	1.18	1.16	48,473	47,130	1.12	1.11	29,742	30,389	1.02	1.01
F construction	45,337	36,700	1.20	0.98	47,087	39,407	1.09	0.93	32,608	19,852	1.12	0.66
G transportation & storage	43,007	41,924	1.14	1.12	45,657	42,937	1.06	1.01	29,980	xxx	1.03	xxx
H communication & other utilities	47,378	47,711	1.26	1.27	51,009	49,910	1.18	1.18	36,157	44,750	1.24	1.49
I wholesale trade	44,963	46,165	1.19	1.23	46,977	47,857	1.09	1.13	32,355	34,773	1.11	1.15
J retail trades	32,592	31,013	0.87	0.83	37,547	35,530	0.87	0.84	23,744	23,202	0.82	0.77
K finance & insurance	43,124	57,318	1.15	1.53	52,474	xxx	1.22	xxx	29,194	xxx	1.00	xxx
L real estate operators & insurance agents	34,489	46,267	0.92	1.23	39,062	54,203	0.91	1.28	26,890	29,575	0.92	0.98
M business services	45,725	43,084	1.21	1.15	50,690	47,188	1.17	1.11	31,131	33,602	1.07	1.12
N government services	38,939	41,694	1.03	1.11	44,507	xxx	1.03	xxx	27,292	xxx	0.94	xxx
O educational services	32,267	32,721	0.86	0.87	35,649	33,937	0.83	0.80	28,309	31,356	0.97	1.04
P health & social services	35,937	33,042	0.95	0.88	40,277	36,107	0.93	0.85	33,364	31,835	1.15	1.06
Q accommodation food & beverage services	27,903	25,562	0.74	0.71	31,433	29,713	0.73	0.70	22,722	21,912	0.78	0.73
R other services	32,553	30,298	0.86	0.81	37,157	33,437	0.86	0.79	25,111	25,243	0.86	0.84
A3 Others managers n.e.c.												
All industries (1980 sic)	54,967	55,298	1.46	1.47	59,376	59,234	1.38	1.39	41,656	45,231	1.43	1.50
A agriculture & related services	38,228	38,178	1.02	1.02	41,280	48,646	0.96	1.14	xxx	xxx	xxx	xxx
B fishing & trapping	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
C logging & forestry	60,824	58,208	1.62	1.55	62,366	59,256	1.44	1.39	xxx	xxx	xxx	xxx
D mining quarrying & oil wells	77,877	84,781	2.07	2.26	79,499	86,417	1.84	2.03	51,150	58,487	1.76	1.94
E manufacturing	57,033	60,467	1.51	1.61	59,588	62,892	1.38	1.48	38,327	44,265	1.32	1.47
F construction	55,297	43,998	1.47	1.17	56,063	44,410	1.30	1.05	34,331	34,331	1.24	1.14
G transportation & storage	52,699	54,069	1.40	1.44	54,437	56,300	1.26	1.33	38,368	39,401	1.32	1.31
H communication & other utilities	59,549	60,160	1.58	1.60	63,133	63,591	1.46	1.50	46,930	49,815	1.61	1.65
I wholesale trade	54,532	51,098	1.45	1.36	57,599	54,030	1.33	1.27	37,780	39,666	1.30	1.32
J retail trades	40,245	36,921	1.07	0.98	42,955	37,519	1.00	0.88	30,545	35,089	1.05	1.16
K finance & insurance	57,003	61,813	1.51	1.65	66,955	75,213	1.55	1.77	41,692	45,432	1.43	1.51
L real estate operators & insurance agents	58,969	54,587	1.57	1.45	63,535	61,525	1.47	1.45	44,558	40,293	1.53	1.34
M business services	56,917	55,063	1.51	1.47	62,313	59,428	1.44	1.40	40,616	44,311	1.40	1.47
N government services	56,538	55,376	1.50	1.47	58,565	56,624	1.36	1.33	48,173	50,649	1.66	1.68
O educational services	62,115	61,821	1.65	1.65	66,337	66,213	1.54	1.56	53,350	55,252	1.83	1.83
P health & social services	46,811	48,429	1.24	1.29	57,249	57,640	1.33	1.36	42,052	44,156	1.45	1.47
Q accommodation food & beverage services	38,589	40,083	1.02	1.07	45,266	40,688	1.05	0.96	26,440	xxx	0.91	xxx
R other services	35,369	37,230	0.94	0.99	41,007	41,574	0.95	0.98	27,126	30,374	0.93	1.01

TABLE 12 (continued)

	Both sexes				Male				Female			
	Average employment income		Ratio to overall average income		Average employment income		Ratio to overall average income		Average employment income		Ratio to overall average income	
	1991	1996	1991	1996	1991	1996	1991	1996	1991	1996	1991	1996
B011-J319 All other occupations												
All industries (1980 sic)	35,363	35,379	0.94	0.94	40,243	39,705	0.93	0.93	28,371	29,287	0.98	0.97
A agriculture & related services	22,223	20,921	0.59	0.56	24,299	22,521	0.56	0.53	16,229	16,590	0.56	0.55
B fishing & trapping	33,352	33,725	0.89	0.90	35,038	35,416	0.81	0.83	25,040	26,660	0.86	0.88
C logging & forestry	40,294	41,644	1.07	1.11	42,000	43,346	0.97	1.02	30,817	32,145	1.06	1.07
D mining quarrying & oil wells	50,650	52,892	1.35	1.41	53,305	55,333	1.23	1.30	36,699	39,414	1.26	1.31
E manufacturing	35,906	37,132	0.95	0.99	39,568	40,509	0.92	0.95	26,162	27,488	0.90	0.91
F construction	36,924	34,185	0.98	0.91	38,426	35,350	0.89	0.83	27,513	26,944	0.95	0.89
G transportation & storage	38,227	37,741	1.02	1.00	40,077	39,281	0.93	0.92	29,010	30,076	1.00	1.00
H communication & other utilities	41,137	41,918	1.09	1.12	45,111	45,256	1.05	1.07	32,872	35,074	1.13	1.16
I wholesale trade	33,804	34,241	0.90	0.91	36,881	36,712	0.85	0.86	26,535	28,215	0.91	0.94
J retail trades	26,561	25,094	0.71	0.67	30,561	28,184	0.71	0.66	21,205	20,907	0.73	0.69
K finance & insurance	33,852	37,728	0.90	1.00	47,321	53,240	1.10	1.25	28,046	30,463	0.96	1.01
L real estate operators & insurance agents	37,109	34,569	0.99	0.92	43,166	39,836	1.00	0.94	30,503	29,119	1.05	0.97
M business services	43,177	42,473	1.15	1.13	52,150	49,543	1.21	1.17	30,992	32,282	1.07	1.07
N government services	40,402	40,850	1.07	1.09	44,648	44,881	1.03	1.06	33,739	34,987	1.16	1.16
O educational services	43,419	43,408	1.15	1.16	48,822	47,626	1.13	1.12	39,095	40,243	1.34	1.34
P health & social services	36,262	36,417	0.96	0.97	54,051	54,294	1.25	1.28	30,698	31,167	1.06	1.03
Q accommodation food & beverage services	19,237	17,934	0.51	0.48	22,674	20,403	0.53	0.48	16,727	16,011	0.58	0.53
R other services	25,535	25,443	0.68	0.68	31,141	29,742	0.72	0.70	20,598	21,417	0.71	0.71

Note: Counts below 250 and corresponding average income have been suppressed.

Perhaps the biggest surprise in examining these data, aside from the extremely low earnings of managers in retail trade, food and accommodation, are the high earnings of managers in fishing and trapping in 1996. Given the extreme economic problems that the fishing industry has experienced in Canada in recent years, especially on the East Coast but even on the West Coast, we were surprised by the high levels of compensation. Perhaps this reflects a much smaller group of managers who work full-time full-year, in an industry that traditionally is very seasonal.

Table 13 combines earnings data with education data for managerial occupations. What jumps out from Table 13 is that the higher the level of education for most managerial groups, the higher the rate of earnings. The only managerial category for which this does not hold true is senior management occupations. For male employees but not female employees, persons with no degree, certificate or diploma earned more money than persons with either a secondary school diploma or a trade certificate or other non-university diploma did. Presumably what is showing up here is the impact of older, self-made men. This category of manager is decreasing rapidly.

TABLE 13

Persons 15 Years and Over Who Worked Full-Time, Full-Year
By Industry Division (1980 SIC), Managerial Occupations (1991 SOC),
Highest Degree and Sex, Showing Average Employment Income (constant 1996 dollars), Census of Population, 1991 and 1996, Canada

	Both sexes				Male				Female			
	1991		1996		1991		1996		1991		1996	
	Ratio to overall average income		Ratio to overall average income		Ratio to overall average income		Ratio to overall average income		Ratio to overall average income		Ratio to overall average income	
All occupations (1991 soc)												
All degrees	37,652	37,556	1.00	1.00	43,162	42,488	1.00	1.00	29,074	30,130	1.00	1.00
PhD, MA, first professional degree or certificate above bachelor	65,134	63,225	1.73	1.68	71,748	70,077	1.66	1.65	50,508	50,671	1.74	1.68
Bachelor or certificate below bachelor	48,888	47,402	1.30	1.26	55,807	53,901	1.29	1.27	39,019	38,929	1.34	1.29
Trades certificate or other non-university certificate	37,092	36,206	0.99	0.96	42,333	41,025	0.98	0.97	28,648	28,840	0.99	0.96
Secondary school graduation diploma	33,162	32,450	0.88	0.86	38,709	37,173	0.90	0.87	26,276	26,417	0.90	0.88
No degree certificate or diploma	30,006	29,102	0.80	0.77	34,253	32,805	0.79	0.77	22,342	22,191	0.77	0.74
A Management occupations												
All degrees	51,859	52,068	1.38	1.39	57,727	57,796	1.34	1.36	35,781	38,136	1.23	1.27
PhD, MA, first professional degree or certificate above bachelor	78,169	77,607	2.08	2.07	83,442	83,380	1.93	1.96	58,091	61,227	2.00	2.03
Bachelor or certificate below bachelor	63,540	62,676	1.69	1.67	69,423	69,209	1.61	1.63	45,302	46,183	1.56	1.53
Trades certificate or other non-university certificate	47,695	46,568	1.27	1.24	52,547	51,357	1.22	1.21	33,654	34,495	1.16	1.14
Secondary school graduation diploma	44,915	44,105	1.19	1.17	50,752	49,559	1.18	1.17	31,686	32,642	1.09	1.08
No degree certificate or diploma	40,608	39,588	1.08	1.05	46,094	44,774	1.07	1.05	27,015	26,914	0.93	0.89
A0 Senior management occupations												
All degrees	82,992	85,362	2.20	2.27	88,557	91,867	2.05	2.16	50,977	55,324	1.75	1.84
PhD, MA, first professional degree or certificate above bachelor	108,552	109,642	2.88	2.92	114,594	116,555	2.65	2.74	70,221	77,089	2.42	2.56
Bachelor or certificate below bachelor	94,871	96,469	2.52	2.57	101,804	104,409	2.36	2.46	55,489	59,540	1.91	1.98
Trades certificate or other non-university certificate	68,791	69,726	1.83	1.86	73,099	74,968	1.69	1.76	44,467	47,343	1.53	1.57
Secondary school graduation diploma	74,310	71,859	1.97	1.91	80,126	78,034	1.86	1.84	44,807	46,930	1.54	1.56
No degree certificate or diploma	66,150	75,152	1.76	2.00	69,919	80,184	1.62	1.89	41,162	41,337	1.42	1.37
A1 Specialist managers												
All degrees	58,349	58,235	1.55	1.55	62,543	62,290	1.45	1.47	45,256	47,348	1.56	1.57
PhD, MA, first professional degree or certificate above bachelor	74,226	74,495	1.97	1.98	77,675	78,557	1.80	1.85	59,071	60,914	2.03	2.02
Bachelor or certificate below bachelor	64,067	63,893	1.70	1.70	68,526	68,710	1.59	1.62	49,586	51,673	1.71	1.72
Trades certificate or other non-university certificate	53,268	52,844	1.41	1.41	57,071	56,440	1.32	1.33	41,684	43,358	1.43	1.44
Secondary school graduation diploma	52,243	51,778	1.39	1.38	56,723	55,623	1.31	1.31	41,139	42,502	1.41	1.41
No degree certificate or diploma	48,345	47,328	1.28	1.26	50,955	49,909	1.18	1.17	39,421	38,703	1.36	1.28

TABLE 13 (continued)

	Both sexes				Male				Female			
			Ratio to overall average income				Ratio to overall average income				Ratio to overall average income	
			1991	1996			1991	1996			1991	1996
A2 Managers in retail trade food etc.												
All degrees	33,526	31,206	0.89	0.83	38,356	35,511	0.89	0.84	24,328	23,579	0.84	0.78
PhD, MA, first professional degree or certificate above bachelor	47,361	41,072	1.26	1.09	52,186	43,981	1.21	1.04	33,313	33,430	1.15	1.11
Bachelor or certificate below bachelor	40,984	37,153	1.09	0.99	45,530	41,795	1.05	0.98	30,255	28,123	1.04	0.93
Trades certificate or other non-university certificate	33,619	30,565	0.89	0.81	37,566	34,315	0.87	0.81	25,056	23,606	0.86	0.78
Secondary school graduation diploma	32,513	30,888	0.86	0.82	37,594	35,496	0.87	0.84	23,545	23,147	0.81	0.77
No degree certificate or diploma	30,972	28,220	0.82	0.75	36,030	32,457	0.83	0.76	22,517	21,209	0.77	0.70
A3 Other managers n.e.c.												
All degrees	54,967	55,298	1.46	1.47	58,376	59,234	1.38	1.39	41,656	45,231	1.43	1.50
PhD, MA, first professional degree or certificate above bachelor	73,008	71,861	1.94	1.91	77,649	76,554	1.80	1.80	58,865	61,394	2.02	2.04
Bachelor or certificate below bachelor	60,738	60,256	1.61	1.60	65,752	65,502	1.52	1.54	46,848	48,025	1.61	1.59
Trades certificate or other non-university certificate	51,194	50,192	1.36	1.34	55,737	54,112	1.29	1.27	36,637	38,862	1.26	1.29
Secondary school graduation diploma	49,017	49,903	1.30	1.33	53,413	53,957	1.24	1.27	37,751	40,694	1.30	1.35
No degree certificate or diploma	47,411	44,148	1.26	1.18	50,952	46,501	1.18	1.09	33,300	35,883	1.15	1.18
B011-J319 All other occupations												
All degrees	35,363	35,379	0.94	0.94	40,243	39,705	0.93	0.93	28,371	29,287	0.98	0.97
PhD, MA, first professional degree or certificate above bachelor	61,676	59,723	1.64	1.59	68,032	66,241	1.58	1.56	49,274	48,888	1.69	1.62
Bachelor or certificate below bachelor	44,949	43,818	1.19	1.17	50,707	49,052	1.17	1.15	38,118	37,900	1.31	1.26
Trades certificate or other non-university certificate	35,592	34,889	0.95	0.93	40,541	39,431	0.94	0.93	28,195	28,341	0.97	0.94
Secondary school graduation diploma	31,236	30,728	0.83	0.82	36,129	34,893	0.84	0.82	25,697	25,767	0.88	0.86
No degree certificate or diploma	28,849	28,045	0.77	0.75	32,805	31,478	0.76	0.74	21,939	21,802	0.75	0.72

Note: All counts below 250 and corresponding average income have been suppressed.

8. Managers in Retail Trade, Food and Accommodation Services: Why Are These Managers Different from All Other Managers?

The most different group of managers from all other managers is managers in retail trade, food and accommodations. These managers are different because they have by far the lowest levels of pay and education of any group of managers. This group is also very large within the entire managerial category, representing about a third of the total. As well, this is the group that has been the most problematical in terms of whether they should be classified as managers or as supervisor. In the past five decades the formal classification manuals have alternated been including them with other managers (1951 and 1961 Occupation Classification Manuals), including them with supervisors (1971 Occupation Classification Manual), partly including them (1980 Standard Occupational Classification), and fully including them as managers (National Occupation Classification).

This category has three main divisions within the NOC: 0621 Retail Trade Managers; 0631 Restaurant and Food Service Managers; and 0632 Accommodation Service Managers. Recognition of the difference in this category is captured in it being a separate grouping within the four-fold division of the managerial field: senior; specialist; managers in retail trade, food, accommodation and beverage; and other managers.

In this section we will examine this managerial category in greater detail. Specifically, we will examine why the share of managers within retail trade has been declining while the share of managers in food and accommodation industries has been increasing. This will be against the background that both groups have a very large number of managers and both stand out because of low pay and low levels of education. The discussion will first consider managers in retail trade, then managers in the combination of accommodation, food and beverage service industries.

8.1 Managers in retail trade

In order to understand better the role of managers in retail trade we have to begin with the long term trends. Table 3 gives a broad perspective on the evolution of the share of managers in retail trade from 1931 to 1996. During this period the share that managers made up of the workforce

in trade fell from 28.9 to 11.7 percent. These figures are not entirely comparable because of the changes in the definition of managers that were discussed in section 2.

However the overall pattern is clear: there was a substantial decline in the proportion that managers represented of employment in retail trade. Even if we use the 1991 SOC classification for 1996, instead of the 1980 SOC, the share of managers in trade is still down quite substantially to 14.9 percent (Table 14). What is even more significant is that this is the only industry in which the proportion of managers has fallen. In 1931 the industry with the next largest managerial percentage was finance with 9.3 percent, one-third the percentage for trade. By 1996, the managerial proportion in trade was smaller than in public administration (government), finance, and the primary sector.

How can we explain the dramatic decline in the share of managers within retail trade? What are the implications for COPS? If we look at employment in the retail we see some fluctuations in the share represented by retail trade, but for the long-term there was little change. Given the large increase in the workforce since 1931, there was an accompanying substantial increase in employment in retail trade. But the number of managers did not keep pace. As indicated in Table 4, the number of managers in retail trade went up by just under 2.5 times between 1931 and 1996, whereas employment in the industry grew six fold.

Perhaps the primary reason for the decline in the proportion of managers in retail trade was the transformation in the structure of organizations in the industry. In 1931, the bulk of retail trade was carried out in small stores, each with a group of managers. Since then there have been two major changes. First there has been the growth of department stores and other multi-product marketing units. As discussed earlier, the larger the size of the establishment, in this case a store, the smaller the percentage those managers represent of total employment. The second development in the structure of retail trade has been the shift to self-service from the use of individual salespersons to sell products. Not only are there fewer salespeople per square foot of store space, but the type of personnel has changed toward more check-out clerks and stock persons. This change in the way products are marketed is also likely to have reduced the proportion represented by managers, although in this case the trend may not be as clear and needs more exploration.

TABLE 14
Managerial Occupations in the Experienced Canadian Labour Force, for Retail Trades
By Industry Division (1980 SIC), Occupation (1991 SOC), Highest Degree and Sex,
1991 and 1996 Censuses of Population

	Both sexes							
	Number of persons		Change 1991-1996		Percent of all degrees		Percent of all occupation	
	1991	1996	Number	Percent	1991	1996	1991	1996
All occupations (1991 soc)								
All degrees	1,831,350	1,781,250	-50100	-2.7	100.0	100.0	100.00	100.00
PhD, MA, first professional degree or certificate above bachelor	18,915	24,040	5,125	27.1	1.0	1.3	100.00	100.00
Bachelor or certificate below bachelor	110,670	146,710	36,040	32.6	6.0	8.2	100.00	100.00
Trades certificate or other non-university certificate	420,460	469,330	48,870	11.6	23.0	26.3	100.00	100.00
Secondary school graduation diploma	624,065	616,385	-7680	-1.2	34.1	34.6	100.00	100.00
No degree certificate or diploma	657,245	524,780	-132465	-20.2	35.9	29.5	100.00	100.00
A Management occupations								
All degrees	298,145	265,135	-33010	-11.1	100.0	100.0	16.28	14.88
PhD, MA, first professional degree or certificate above bachelor	7,035	7,040	5	0.1	2.4	2.7	37.19	29.28
Bachelor or certificate below bachelor	32,475	34,370	1,895	5.8	10.9	13.0	29.34	23.43
Trades certificate or other non-university certificate	77,895	75,350	-2545	-3.3	26.1	28.4	18.53	16.05
Secondary school graduation diploma	98,070	86,530	-11540	-11.8	32.9	32.6	15.71	14.04
No degree certificate or diploma	82,670	61,835	-20835	-25.2	27.7	23.3	12.58	11.78
A0 Senior management occupations								
All degrees	12,010	10,395	-1615	-13.4	100.0	100.0	0.66	0.58
PhD, MA, first professional degree or certificate above bachelor	775	600	-175	-22.6	6.5	5.8	4.10	2.50
Bachelor or certificate below bachelor	2,165	1,975	-190	-8.8	18.0	19.0	1.96	1.35
Trades certificate or other non-university certificate	2,955	2,870	-85	-2.9	24.6	27.6	0.70	0.61
Secondary school graduation diploma	3,395	2,735	-660	-19.4	28.3	26.3	0.54	0.44
No degree certificate or diploma	2,720	2,210	-510	-18.8	22.6	21.3	0.41	0.42
A1 Specialist managers								
All degrees	21,700	13,690	-8010	-36.9	100.0	100.0	1.18	0.77
PhD, MA, first professional degree or certificate above bachelor	1,115	685	-430	-38.6	5.1	5.0	5.89	2.85
Bachelor or certificate below bachelor	4,355	2,790	-1565	-35.9	20.1	20.4	3.94	1.90
Trades certificate or other non-university certificate	5,865	3,980	-1885	-32.1	27.0	29.1	1.39	0.85
Secondary school graduation diploma	6,510	3,995	-2515	-38.6	30.0	29.2	1.04	0.65
No degree certificate or diploma	3,850	2,240	-1610	-41.8	17.7	16.4	0.59	0.43
A2 Managers in retail trade food etc.								
All degrees	255,335	237,395	-17940	-7.0	100.0	100.0	13.94	13.33
PhD, MA, first professional degree or certificate above bachelor	4,725	5,695	970	20.5	1.9	2.4	24.98	23.69
Bachelor or certificate below bachelor	24,890	29,170	4,280	17.2	9.7	12.3	22.49	19.88
Trades certificate or other non-university certificate	66,320	67,365	1,045	1.6	26.0	28.4	15.77	14.35
Secondary school graduation diploma	85,535	78,755	-6780	-7.9	33.5	33.2	13.71	12.78
No degree certificate or diploma	73,865	56,420	-17445	-23.6	28.9	23.8	11.24	10.75
A3 Other managers n.e.c.								
All degrees	9,100	3,655	-5445	-59.8	100.0	100.0	0.50	0.21
PhD, MA, first professional degree or certificate above bachelor	415	60	-355	-85.5	4.6	1.6	2.19	0.25
Bachelor or certificate below bachelor	1,070	440	-630	-58.9	11.8	12.0	0.97	0.30
Trades certificate or other non-university certificate	2,750	1,140	-1610	-58.5	30.2	31.2	0.65	0.24
Secondary school graduation diploma	2,625	1,045	-1580	-60.2	28.8	28.6	0.42	0.17
No degree certificate or diploma	2,240	970	-1270	-56.7	24.6	26.5	0.34	0.18
B011-J319 All other occupations								
All degrees	1,533,205	1,516,115	-17090	-1.1	100.0	100.0	83.72	85.12
PhD, MA, first professional degree or certificate above bachelor	11,875	17,000	5,125	43.2	0.8	1.1	62.78	70.72
Bachelor or certificate below bachelor	78,190	112,340	34,150	43.7	5.1	7.4	70.65	76.57
Trades certificate or other non-university certificate	342,570	393,980	51,410	15.0	22.3	26.0	81.48	83.95
Secondary school graduation diploma	525,995	529,855	3,860	0.7	34.3	34.9	84.29	85.96
No degree certificate or diploma	574,570	462,940	-111630	-19.4	37.5	30.5	87.42	88.22

In relation to all managers, the developments within retail trade have drastically reduced the share that managers in this industry represent of all managers. Table 5 shows that in 1931 every other manager in Canada was in retail trade. By 1996 retail trade was still the single largest location of managers, but the share had dropped from one out of two, to one out of five.

An additional factor for consideration is the low levels of pay and education of managers in retail trade. Table 10 showed that more than half of the managers in retail trade had no education beyond secondary school, and fewer than sixteen percent had a university degree. Table 12 indicated that in 1996 managers in retail trade, working full-time full-year, earned eleven percent less than the average for all employees in Canada. These low levels of earnings have persisted for decades, in fact since our data for 1931. Presumably this is related to the general structure of wages in the industry, an industry heavily dependent on part-time workers, primarily female, and one with easy entry for new firms and relatively lower levels of capital per employee. As just discussed, the industry has been changing with the introduction of franchised operations and standardized management training procedures emphasizing quality of service and customer satisfaction. It remains to be seen how this will affect managerial pay and education requirements.

There are several implications for COPS of the slower growth in managers in retail trade. Given the large number and proportion that these managers represent of all managers, the likely slower growth in net new job openings will, on balance, contribute toward an increase in the average level of pay and education of managers relative to the entire workforce, all things being equal. There is still a sizeable group of managers in retail trade, but that group is shrinking in relative terms.

Second, and most important, there will likely be much greater emphasis on the retraining and upgrading of managers in retail trade. This is coming about through market forces as well as the general change in the structure of the industry. Perhaps the biggest example of a major change in the training of managers came with the entry of Walmart into Canada, with its acquisition of over one hundred Woolco stores. Walmart not only redesigned the stores but also introduced a major staff and managerial training program. Other retail organizations responded to the entry of Walmart with training programs of their own, perhaps the largest of which was Zellers. These developments, and other related managerial changes that will affect the industry, are likely to

continue. What needs to be explored is how this has affected the types of education and training that companies are looking for. This would apply to persons recruited from the outside the industry for managerial positions, and to persons already employed in the industry who are seeking to upgrade their positions. It should be expected that these changes would raise the entry education and training levels of managers. It should also be reflected in increases in relative earnings of managers. How long this will take depends on how widespread and how intense are these upgrading programs. In any event, the managerial function within retail trade merits careful observation and further study by COPS.

8.2 Managers in accommodation, food and beverage services

The second group of managers that differs from other managers is the group of managers in accommodation, food and beverage industries (See Table 15). Like managers in retail trade, this group of industries stands out within managerial functions because of the low pay and the low levels of education. What makes this group different from managers in retail trade is that this group has been increasing over time. Our discussion will consider the sources of increase in this group and the implications for COPS.

Historical Tables, 3, 4 and 5, do not separate accommodation, food and beverage services, which was the largest part of personal service, from the combination of business and personal service. In this examination we focus on other tables which do separate these industries. In Table 7 we see that in 1931, personal services had the third largest number of managers of any industry, 8.6 percent, but as a proportion of employees, the share was just average at 5.9 percent. By 1961 there was an increase in the proportion of all managers who were in personal services, but most important, the proportion that this represented of all employees in the personal service industry almost doubled, to 11.0 percent. The next period for which we have comparable data are shown in Table 9. In this case we have specific data on accommodation and food service industries. The proportion that managers represented of all employees in this industry went up by almost a third. How can we explain these changes?

There have been two major developments affecting accommodation and food and beverage services, especially since the 1960s: the growth of employment in the industry; and the change in the composition of establishments in the industry. The growth in employment in this industry is the result of three factors. First, there was a rise in real incomes that has enabled people to spend

TABLE 15
Managerial Occupations in the Experienced Canadian Labour Force, for Accommodation, Food & Beverages Services
By Industry Division (1980 SIC), Occupation (1991 SOC), Highest Degree and Sex,
1991 and 1996 Censuses of Population

	Both sexes							
	Number of persons		Change 1991-1996		Percent of all degrees		Percent of all occupation	
	1991	1996	Number	Percent	1991	1996	1991	1996
All occupations (1991 soc)								
All degrees	909,710	988,590	78,880	8.7	100.0	100.0	100.00	100.00
PhD, MA, first professional degree or certificate above bachelor	7,230	10,305	3,075	42.5	0.8	1.0	100.00	100.00
Bachelor or certificate below bachelor	44,650	66,835	22,185	49.7	4.9	6.8	100.00	100.00
Trades certificate or other non-university certificate	152,065	197,080	45,015	29.6	16.7	19.9	100.00	100.00
Secondary school graduation diploma	287,660	339,905	52,245	18.2	31.6	34.4	100.00	100.00
No degree certificate or diploma	418,110	374,460	-43,650	-10.4	46.0	37.9	100.00	100.00
A Management occupations								
All degrees	125,140	125,895	755	0.6	100.0	100.0	13.76	12.73
PhD, MA, first professional degree or certificate above bachelor	2,670	3,300	630	23.6	2.1	2.6	36.93	32.02
Bachelor or certificate below bachelor	13,220	16,105	2,885	21.8	10.6	12.8	29.61	24.10
Trades certificate or other non-university certificate	30,460	34,280	3,820	12.5	24.3	27.2	20.03	17.39
Secondary school graduation diploma	38,750	39,410	660	1.7	31.0	31.3	13.47	11.59
No degree certificate or diploma	40,040	32,800	-7,240	-18.1	32.0	26.1	9.58	8.76
A0 Senior management occupations								
All degrees	3,165	2,380	-785	-24.8	100.0	100.0	0.35	0.24
PhD, MA, first professional degree or certificate above bachelor	195	170	-25	-12.8	6.2	7.1	2.70	1.65
Bachelor or certificate below bachelor	710	500	-210	-29.6	22.4	21.0	1.59	0.75
Trades certificate or other non-university certificate	770	590	-180	-23.4	24.3	24.8	0.51	0.30
Secondary school graduation diploma	800	560	-240	-30.0	25.3	23.5	0.28	0.16
No degree certificate or diploma	680	560	-120	-17.6	21.5	23.5	0.16	0.15
A1 Specialist managers								
All degrees	4,425	2,885	-1,540	-34.8	100.0	100.0	0.49	0.29
PhD, MA, first professional degree or certificate above bachelor	270	160	-110	-40.7	5.5	5.5	3.73	1.55
Bachelor or certificate below bachelor	1,070	665	-405	-37.9	23.1	23.1	2.40	0.99
Trades certificate or other non-university certificate	1,440	1,135	-305	-21.2	39.3	39.3	0.95	0.58
Secondary school graduation diploma	1,090	585	-505	-46.3	20.3	20.3	0.38	0.17
No degree certificate or diploma	550	345	-205	-37.3	12.0	12.0	0.13	0.09
A2 Managers in retail trade food etc.								
All degrees	114,690	119,580	4,890	4.3	100.0	100.0	12.61	12.10
PhD, MA, first professional degree or certificate above bachelor	2,065	2,920	855	41.4	2.4	2.4	28.56	28.34
Bachelor or certificate below bachelor	10,995	14,695	3,700	33.7	12.3	12.3	24.62	21.99
Trades certificate or other non-university certificate	27,495	32,275	4,780	17.4	27.0	27.0	18.08	16.38
Secondary school graduation diploma	36,070	37,960	1,890	5.2	31.7	31.7	12.54	11.17
No degree certificate or diploma	38,070	31,740	-6,330	-16.6	26.5	26.5	9.11	8.48
A3 Other managers n.e.c.								
All degrees	28,555	1,045	-1,810	-63.4	100.0	100.0	0.31	0.11
PhD, MA, first professional degree or certificate above bachelor	140	50	-90	-64.3	4.8	4.8	1.94	0.49
Bachelor or certificate below bachelor	450	250	-200	-44.4	23.9	23.9	1.01	0.37
Trades certificate or other non-university certificate	745	285	-460	-61.7	27.3	27.3	0.49	0.14
Secondary school graduation diploma	790	310	-480	-60.8	29.7	29.7	0.27	0.09
No degree certificate or diploma	735	155	-580	-78.9	14.8	14.8	0.18	0.04
B011-J319 All other occupations								
All degrees	784,570	862,690	78,120	10.0	100.0	100.0	86.24	87.26
PhD, MA, first professional degree or certificate above bachelor	4,555	7,010	2,455	53.9	0.8	0.8	63.00	68.03
Bachelor or certificate below bachelor	31,425	50,730	19,305	61.4	5.9	5.9	70.38	75.90
Trades certificate or other non-university certificate	121,610	162,800	41,190	33.9	18.9	18.9	79.97	82.61
Secondary school graduation diploma	248,905	300,495	51,590	20.7	34.8	34.8	85.53	88.41
No degree certificate or diploma	378,070	341,660	-36,410	-9.6	39.6	39.6	90.42	91.24

an increasing proportion of their disposable income on travel and eating out. Second, the huge increase in female participation in the labour force increased the demand for food services, including low cost fast-foods, since women had less time to devote to meal preparation. A third factor behind the growth of food services is the rise of subcontracting by firms in manufacturing and other industry sectors of cafeterias and other meals services that firms themselves used to provide to their employees. This was done both as a part of cost savings due to the greater specialization of food service firms, and the fact that wages in the food service sector were well below the average wage rates in manufacturing. Thus a manufacturing company could contract food services to a specialized firm and not have to carry the costs of higher wage rates and benefits, and possibly scheduling problems and less than full-time employment since there are predictable peak periods for food services, namely, at meal times.

In addition to the growth of employment, there were major changes in the organization and structure of accommodation and food and beverage service industries. The growth of franchising by fast food chains, such as McDonalds, Burger King, Wendy's, Tim Horton's, Pizza Hut, Pizza Pizza, Versa, etc, meant that a lot of the increase in employment in this industry was taking place through the growth of small establishments. In fact, part of the widely-published findings that small business was the engine of employment growth in the 1990s, was due to the growth of establishments that were part of large chains of food service firms. These are small individual establishments, but they are not entirely small businesses. What we don't know is what proportion of the growth in employment in small firms is represented by franchisees of large organizations.

The growth in employment in the food industry through small establishments and the change in the structure of these establishments has combined to increase the proportion of managers in the industry. This is the result of both removing food services from manufacturing and other industries' employment and from the structural changes that have taken place.

In the case of accommodations, the changes that have taken place over time have also tended to increase the proportion of managers. The biggest growth in accommodations since the 1960s was the growth in moderately-priced accommodation chains of hotels, and motels, again with many following the franchise principle. This development was also related to the growth of real incomes and the increase in interest in travel by middle and lower income people. The hotel and

motel chains, to be successful, had to be very cost conscious. This meant greater efficiency and more managerial supervision. The result again was an increase in the proportion of managers in accommodations.

There are several implications of these developments for COPS. First, the growth of lower paying managerial jobs in accommodations and food services is likely to have been accompanied by greater turnover, although this may be moderated by the lower levels of education. This is a subject for a separate in-depth analysis. The question is what this industry is doing to make its managerial positions more attractive. It would appear that the competitive nature of the industry and the lower education requirements for the jobs has affected the managerial positions. The hospitality industry sectoral council has introduced education and training programs in an effort to increase productivity, reduce turnover and provide a more attractive work environment (see *The Proceedings of the Symposium on the Universities' Collaborative Role in Training and Adjustment*, Toronto: Council of Ontario Universities, 1994). The question for COPS is the extent to which this has been successful and how it is affecting the earnings and education levels of positions for which people are being recruited for or upgraded to.

Another implication is whether the slowdown in the growth in female participation, and the stagnation in real incomes have affected the employment opportunities in the accommodation and food industries and what further changes are anticipated.

Because the patterns of change in managers in accommodations and food services have been so different from that experienced in retail trade, both industry sectors merit detailed examination, both from the supply-demand imbalances in recent years, especially since the recession at the beginning of the 1990s. In addition, a further examination of these industries could cast some light on career patterns for managers, both within retail trade, accommodations and food and beverage services, as well as patterns in the movement of managers among firms in the industry, and to and from other industries. Since almost one third of all managers in Canada work in the field of managing retail trade, accommodation and food services, and since this huge group has significantly lower employment income and educational levels, this group will continue to be particularly important to our understanding of possible future trends in managers in Canada.

9. Implications for COPS

The following points discuss the implications of this study for the Canadian Occupational Projection System (COPS).

1. The repeated changes that have taken place over the past four decades in the definition of who is a manager suggest the need for caution in using long-term trends in the share of managers in the workforce as a basis for future projections. This is particularly the case with using statistics based on the 1971 occupation classification for projecting increases in the number and share of managers. It was found that the 1971 classification gave an unrealistically low estimate of the number of managers in Canada. For example, when Statistics Canada's Labour Force Survey changed from the 1961 to the 1971 occupational classification, the number of managers in Canada plummeted in one year by 318,000 (39 percent), from 810,000 in 1972 to 492,000 in 1973.

This means that it is important to not only have consistent classifications, but also to be certain that the classification is appropriate for what is being measured. In the case of managers, the NOC, and to a somewhat lesser extent the 1980 SOC was seen to be a more representative measure of managers than the 1971 SOC.

2. The 1980 SOC is not as good a measure of the change over time in the number of managers as the NOC or the pre-1971 classifications, because the 1980 SOC retained as part of the managerial group code 117, occupations related to managers and administration. Code 117 includes accountants, human resource officers, etc., groups that previously had the designation professionals. As the study has shown, this professional group grew much more than the remaining group of managers, the core managerial group, codes 111 + 113/144, in the 1980s and 1990s. Again this indicates the dangers of using a classification that over- or under-states the number of persons who could reasonably be termed managers. As well, it points to the importance of the faster growth of occupations related to management (a group consisting of selected professionals, such as accountants, personnel officers, and purchasing agents and buyers), than the growth of the managers themselves.

3. The shift-share analysis of the sources of change in managers was presented for two periods of time in the past seven decades, 1931-1961, and 1971-1996. The difference between the two periods was the underlying sources of change. In the case of the 1931-1961 period, the largest factor contributing to the growth of managers was the increase in employment in industries where there was a substantial proportion of managers (composition effect). This factor contributed almost three-quarters of the increase. The remaining one-quarter came from the increase in the percentage of managers in most industries (termed incidence), with the exception of trade where managers were still larger than any other industry but their proportion decreased.

Over the 1971-1996 period, the factors that caused the increase were reversed, with the incidence effects accounting for all of the increase in the proportion of managers. That is, the dominant factor was the substantial increase in the share of managers in most industries.

For COPS, the shift-share analysis underlines the importance of disaggregating the changes on an industry by industry basis and then looking at what is happening to managers within each industry.

4. The broadening of the increase in the share of managers in most industries undoubtedly relates to the change in the managerial function over time, and to an apparent change in the structure of employment within firms. Both these developments have implications for COPS. With respect to the managerial function itself, the introduction of computer and related information technology has increased the span of control of managers, but also enlarged the areas of direct responsibilities of managers. In other words, there is more for managers to do today than three decades ago because information and analysis needs have increased. The question for COPS is whether this pattern is slowing down or whether the continuing advances in information technology will further the broadening of managerial functions and hence further increase the share of managers in most organizations.

5. The change in the structure of employment within firms has also tended to increase the proportion of employees who are managers. The major change has been the reduction in the average number of employees in establishments. This has resulted from several developments. First, there has been trend in manufacturing and in other industry sectors toward the outsourcing of such functions as cleaning and janitor services, food services, guards and other security

services, as well as some professional services including legal, accounting and wage and salary processing. The result is that the units that remain are smaller. As well, smaller units, each of which would have their own managerial hierarchy, administer the provision of the specialized services. In addition management philosophy has been moving away from gigantic establishments to smaller more manageable units. This philosophy has perhaps been best articulated by Frank Stronach, whose Magna Corporation has stressed the importance of keeping establishment size small in order that managers stay directly in touch with the smaller number of employees in each plant. Reward structures are established to promote keeping Magna plants small. Heads of Magna manufacturing units are rewarded for setting up new manufacturing units rather than expanding the number of employees in existing units.

For COPS this means that in projecting the number of employees in an industry and within that the number of managers, it is necessary to examine the trends in firm and establishment size, since the smaller the size of each unit, the greater the number of managers.

6. An important consideration that could not be explored in this study because of the complexity and the need for longitudinal information relates to the career paths of managers, including the pattern of movement of managers among firms and industries. This issue relates, in turn, to the nature of education and training of managers. What we don't know is the extent to which managers in certain industries come from particular education, training and work experience backgrounds. HRDC's survey of graduates two and five years after graduation is an important starting point for information on career paths, but what is needed for an occupation like managers is a later follow up 15, 20 and 25 years after graduation.

For COPS such a career path study would be valuable not only in highlighting the general patterns of career paths, but specifically examining the different career paths of managers in various industries. As discussed above, the single largest group of managers is in retail trade, food and accommodation services. These managers have very different education and earnings profiles, and we would assume that they also have very different career paths. More targeted research is needed to understand not only past career paths in these industries, but also possible future developments.

10. Concluding Comments

Managers, as a percentage of the Canadian workforce, have more than doubled between the beginning and the ending of the Twentieth Century. What makes this increase even more significant is that managers are among the most highly educated and best paid employees in Canada. Students looking to careers and employees seeking advancement see managerial positions as providing an opportunity for the fulfillment of job expectations. The primary route to a managerial position is increasingly seen to be through business education programs, primarily at universities. As a result, the future trend in job openings in management is of interest to a wide range of groups in society. This study examines historical trends in managerial employment as a means of better understanding both why managers grew in the past, and what this can tell us about developments in the managerial field in the future.

The starting point is the definition of who is a manager. While a definition such as "a manager is someone responsible for directing the work of other employees," would seem to be straightforward, in fact there have been major changes over time in who is classified as a manager. As a result, measurements of the number of people who are considered to be in the managerial workforce are extremely sensitive to the classification that is used. The estimates in this report show the numbers of managers, using the various definitions that have been applied in Canada in the Twentieth Century. While the most recent estimates show that the percentage of employees who are classified as managers doubled between 1901 and 1998, these are approximations because there have been not only increases but some decreases in the share of managers in the workforce. Caution is therefore advised in approaching projections for the future.

An area where more research is needed concerns managers in the trade, food and accommodation industries, the sectors that contains the largest number of managers, approximately 30 percent. Although the share of managers in these latter sectors has been declining, they still provide major areas for managerial jobs. The difficulty for considerations of career opportunities is that these managerial jobs are the ones that have significantly lower rates of pay and have far fewer highly educated people. This group is also the one category that has been most subject to swings in classification as to whether or not such managers as in retail trade departments, restaurants and hotels, should or should not be called managers. Further

exploration of the role and classification of managers in trade, food and accommodation could provide valuable insights relating to projections of future managerial job opportunities.

Behind the general growth in managers are specific patterns that provide insights for projections of future developments. In the first half of the century, the factor that was the most important for increasing the share of managers in the workforce in Canada was the growth of employment in industries such as manufacturing, trade government, personal service and finance that have above average proportions of managers. In the second half of the century what was most important for the increase in managers was a broadly based increase in the share of managers in every industry, except for retail trade. This widespread deepening of the managerial function is the result of changes in technology, especially information technology, changes in the structure of organizations, and changes in the functions that firms perform themselves and the functions that firms contract out to other organizations. In addition, long-term economic trends toward increased efficiency and productivity through increased specialization, and the trend toward a reduction in the average number of employees in establishments have worked in favour of increasing the proportion that managers represent of a firm's employment.

All of these developments suggest that managers will continue to be a crucial occupation in the economy and the career goal for many who are students or who are looking to improve their future position in the workforce. This makes the task of Human Resource Development, with respect to career advice for managerial jobs and the types of education and training that will lead to such jobs, both important and challenging.

Appendix

Examples of the Impact of Differences in the Classification of Managers

The primary difference between the major occupation group manager, according to the 1951 as compared with the 1971 classifications, was the treatment of managers in trade and service industries, such as managers of departments in retail department stores, hotels and laundries. In 1951 these occupations were included in the managerial group, whereas in the 1971 classification they were included in sales and service occupations.

The 1971 Canadian Classification and Dictionary of Occupations, (the base for the 1971 Standard Occupational Classification, which was revised somewhat for the 1980 Standard Occupational Classification), was fundamentally different from earlier occupational classifications. Only 9 of 486 occupation classes were comparable between the 1961 and the 1971 classification manuals (Meltz and Stager 1979, p. 188). By contrast, in the 1961 census, 158 of the 273 classes were comparable with similar unit groups in 1951. Second, the coding practice for managers in the 1971 census further reduced the recorded number of managers:

In 1971, specialist managers (personnel, sales and so forth) could only be coded into these unit groups if they earned over \$25,000. In 1981, a salary limit was applied only for general managers. As a result, the growth observed [between 1971 and 1981] has been artificially swollen to some extent. It is impossible, however, to pinpoint how much this second factor affects this growth. The rule was not applied uniformly to all specialist managers in 1971; its use was highly erratic. (Montigny 1988, p.26)

In looking back historically, the definition of which occupations are included or excluded from the managerial group, has perhaps experienced more change than any other major category. At the same time there appear to be certain "swing" groups that move in and out of the managerial category. In particular, managers in trade and service industries seem to alternate between inclusion (in the 1951 and 1961 classifications), exclusion from the 1971 OCM (Occupational Classification Manual), partial inclusion in the 1980 base and almost full inclusion in the 1991 SOC (Standard Occupational Classification).

For example, in 1951, 047 Owners, Managers, Dealers - Retail Trade included Manager, retail department - Retail trade (*Classification of Occupations*, 1951). In 1971, the same occupation was coded 5130 and included in the major group Sales Occupations (*Occupational Classification Manual*, 1971). In the 1980 *Standard Occupational Classification* (1981), Retail department manager - retail trade was back with the managerial group and coded 1137, compared with the code of 5130 in the Sales group in 1971 (see the comparison table of 1980 SOC with the 1971 OCM (1980 *Standard Occupational Classification*, 1981 p. 541). The retail department managers remained with the managerial group in the 1991 SOC within group A211.0621, indicated in the comparison table between the 1980 and 1991 *Standard Occupational Classification* volume (1993, p. 545). The 1961 occupation classification was even more inclusive of managers than that in 1951. A sizeable number of persons who were owners and managers in education, health, services to business, etc. were added in 1961 (see Meltz, 1969, p. 33 for a comparison of the 1951 and 1961 occupational classifications).

The impact of the changes in classification on the change in number of managers between 1961 and 1971 was discussed above with reference to Tables 1 and 2. Another way of showing the impact of the changes in classification is through data from the Labour Force Survey presented in Table 4. In this table the actual number of managers are presented without any adjustment of the classification bases. The data on managers from 1966 to 1972 are on the 1961 OCM; the data from 1973 to 1983 are on 1971 OCM; while from 1984 the figures on the 1980 SOC. What is striking are the dramatic changes in the numbers of managers between 1972 and 1973 and between 1983 and 1984. In 1972 the Labour Force Survey indicated 810, 000 managers in Canada (figures are for the annual average). A year later the number had plummeted to 492,000, a decline of almost 40 percent. The only change of which we are aware is the move from the 1961 OCM to the 1971 OCM. A sharp transition also occurred between 1983 and 1984 when the number of managers rose by 272,000 or 29 percent. Again it is difficult to think of a factor other than the change from the 1971 OCM to the 1980 OCM, which among other changes, returned to including managers of retail departments with managers.

Not surprisingly, these shifts in the classification of managers are associated with shifts in the opposite direction of sales, and it appears to a much lesser extent in service occupations. This is illustrated in the comparative Table A1 presented below.

TABLE A1
Labour Force in Selected Occupations, Census Data

Year	Managerial	Sales (Commercial)	Service
1951 OCM			
1951	392,896	315,268	516,360
1961	500,911	439,672	799,800
1961 OCM			
1951	420,181	286,889	514,412
1961	538,131	410,409	794,115
1971 OCM			
1961	210,681	736,270	854,899
1971	372,245	815,740	969,920

Sources: 1961 Occupational Classification Manual; Sylvia Ostry, *The Occupational Composition of the Canadian Labour Force*; 1971 OCM: *Occupational Trends 1961-1986*; Classification of Occupations.

The change from the 1951 to the 1961 occupational classification increased the number of managers by approximately seven percent in each year, and decreased the number of sales persons by approximately nine percent in 1951 and under seven percent in 1961. The change in classification had virtually no impact on the number of persons in service occupations.

The introduction of the 1971 OCM had a dramatic effect on managerial and on sales occupations, but surprisingly it had no appreciable effect on the total of the two. The combination of managerial and sales occupations for the year 1961 was 940,583 using the 1951 OCM, 948,540 using the 1961 OCM, and 946,951 using the 1971 OCM. This, in itself is not proof that the change in the classification of managers is responsible for the shift toward sales, however it is consistent with the changes we anticipated in our earlier discussion of the differences between the 1971 OCM and the 1961/1951 OCMs.



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